

AC AAF19794;
 XX
 DT 14-MAR-2001 (first entry)
 DE Endothelin ETA receptor polynucleotide fragment #1361.
 XX
 KW Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
 KW human; airway disorder; bronchoconstriction; lung inflammation;
 KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
 KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cyostatic;
 KW respiratory obstruction; pulmonary vasoconstriction; impeded respiration;
 KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
 KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
 KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
 KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
 KW cancer; ss.
 XX
 OS Homo sapiens.
 XX
 PN W0200062736-A2.
 XX
 PD 26-OCT-2000.
 XX
 PE 24-MAR-2000; 2000WO-US008020.
 XX
 PR 06-APR-1999; 99US-0127958P.
 XX
 PA (UYEC-) UNIV EAST CAROLINA.
 PA (NYCE/) NYCE J W.
 XX
 PI Nyce JW;
 FI
 DR WPI; 2000-679539/66.
 DR
 XX
 PT Low adenosine (A) content antisense oligonucleotides which do not trigger
 PT adenosine receptors during metabolism, useful e.g. for treating cancers
 PT and respiratory obstructions.
 PT
 PS Claim 14; Page 243; 1592pp; English.
 PS
 XX The present invention describes low adenosine (A) content antisense
 CC oligonucleotides and compositions (I) comprising them. In the antisense
 CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
 CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
 CC immunosuppressive, antiasthmatic, hypotensive and cyostatic activities.
 CC The antisense oligonucleotides and (I) can be used to down-regulate the
 CC expression and or activity of target polypeptides associated with
 CC lung/respiratory disorders and malignancies, such as stimulating and
 CC activating peptide factors and transmitters, transcription factors,
 CC immunoglobulins and antibodies, antibody receptors, cytokines and
 CC chemokines, endogenously produced specific and non-specific enzymes,
 CC binding proteins, adhesion molecules and their receptors, cytokine and
 CC chemokine receptors, adenosine receptors, bradykinin receptors, central
 CC nervous system (CNS) and peripheral nervous and non-nervous system
 CC receptors, CNS and peripheral nervous and non-nervous system peptide
 CC transmitters, defensins, growth factors, vasoactive peptides and
 CC receptors, binding proteins and malignancy associated proteins. The
 CC antisense oligonucleotides may be used in this way to treat disorders
 CC including respiratory obstruction (especially pulmonary obstruction
 CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
 CC surfactant hypoproduction which are associated with a disease or
 CC condition selected from pulmonary vasoconstriction, inflammation,
 CC allergies, asthma, impeded respiration, respiratory distress syndrome
 CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
 CC hypertension, emphysema, chronic obstructive pulmonary disease (COPD),
 CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
 CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
 CC fragments and antisense oligonucleotides used in the exemplification of
 CC the present invention
 XX
 SQ Sequence 19 BP; 0 A; 6 C; 7 G; 6 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.2; DB 1; Length 19;

Best Local Similarity 84.2%; Pred. No. 8.1e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1636 GGGACAGAAACCAAGGCC 1654
 ID 19 GAGCCAGAGCCAAAGGCC 1
 DB
 RESULT 655
 AAF19585
 ID AAF19585 standard; DNA; 19 BP.
 AC AAF19585;
 XX
 DT 14-MAR-2001 (first entry)
 DE Human IL5 polynucleotide fragment #1152.
 XX
 KW Low adenosine antisense oligonucleotide; phosphorothioate; allergy;
 KW human; airway disorder; bronchoconstriction; lung inflammation;
 KW surfactant depletion; respiratory; bronchodilator; antiinflammatory;
 KW immunosuppressive; antiasthmatic; analgesic; hypotensive; cyostatic;
 KW respiratory obstruction; pulmonary vasoconstriction; impeded respiration;
 KW surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
 KW respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
 KW pulmonary hypertension; emphysema; pulmonary transplantation rejection;
 KW chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
 KW cancer; ss.
 XX
 OS Homo sapiens.
 XX
 PN W0200062736-A2.
 XX
 PD 26-OCT-2000.
 XX
 PE 24-MAR-2000; 2000WO-US008020.
 XX
 PR 06-APR-1999; 99US-0127958P.
 XX
 PA (UYEC-) UNIV EAST CAROLINA.
 PA (NYCE/) NYCE J W.
 XX
 PI Nyce JW;
 FI
 DR WPI; 2000-679539/66.
 DR
 XX
 PT Low adenosine (A) content antisense oligonucleotides which do not trigger
 PT adenosine receptors during metabolism, useful e.g. for treating cancers
 PT and respiratory obstructions.
 PT
 PS Claim 14; Page 208; 1592pp; English.
 PS
 XX The present invention describes low adenosine (A) content antisense
 CC oligonucleotides and compositions (I) comprising them. In the antisense
 CC oligonucleotides the A is replaced by a 'Universal' or alternative base.
 CC (I) can have respiratory, bronchodilator, antiinflammatory, analgesic,
 CC immunosuppressive, antiasthmatic, hypotensive and cyostatic activities.
 CC The antisense oligonucleotides and (I) can be used to down-regulate the
 CC expression and or activity of target polypeptides associated with
 CC lung/respiratory disorders and malignancies, such as stimulating and
 CC activating peptide factors and transmitters, transcription factors,
 CC immunoglobulins and antibodies, antibody receptors, cytokines and
 CC chemokines, endogenously produced specific and non-specific enzymes,
 CC binding proteins, adhesion molecules and their receptors, cytokine and
 CC chemokine receptors, adenosine receptors, bradykinin receptors, central
 CC nervous system (CNS) and peripheral nervous and non-nervous system
 CC receptors, CNS and peripheral nervous and non-nervous system peptide
 CC transmitters, defensins, growth factors, vasoactive peptides and
 CC receptors, binding proteins and malignancy associated proteins. The
 CC antisense oligonucleotides may be used in this way to treat disorders
 CC including respiratory obstruction (especially pulmonary obstruction
 CC and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or
 CC surfactant hypoproduction which are associated with a disease or

```
CC condition selected from pulmonary vasoconstriction, inflammation,
CC allergies, asthma, impeded respiration, respiratory distress syndrome
CC (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary
CC hyperinflation, emphysema, chronic obstructive pulmonary disease (COPD),
CC pulmonary transplantation rejection, pulmonary infections, bronchitis,
CC and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
CC fragments and antisense oligonucleotides used in the exemplification of
CC the present invention
XX
SQ Sequence 19 BP; 0 A; 9 C; 1 G; 9 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 8.1e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1980 CCCTCTGTCTGTCTCTCC 1998
DB 1 CTCTCCGCTCTTCTCTCC 19

RESULT 656
AAC60415/C
ID AAC60415 standard; DNA; 19 BP.
XX
AC AAC60415;
XX
DT 19-FEB-2001 (first entry)
XX
DE Primer eGFP2 used to modify eGFP coding region.
XX
KW Disease; intron; plant; animal; ds.
XX
OS Synthetic.
XX
PN WO200063359-A2.
XX
PD 26-OCT-2000.
XX
PF 17-APR-2000; 2000MO-GB001454.
XX
PR 16-APR-1999; 99GB-00008788.
XX
PA (UNLO ) UNITV COLLEGE LONDON.
XX
PI Roes JT;
XX
DR WPI; 2000-679594/66.
XX
PT Polynucleotides having a heterologous intron, useful for manufacturing
PT medicaments for treating human and animal diseases, by stable
PT introduction into cells.
XX
PS Example 1; Page 25; 40pp; English.
XX
CC The present invention relates to a coding sequence with a heterologous
CC intron for treating diseases. The invention is also useful for obtaining
CC a transgenic plant having increased resistance to an external stress such
CC as herbicide, a pathogen or pest or an unfavourable environmental factor
CC
XX Sequence 19 BP; 4 A; 5 C; 9 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 8.1e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 624 CTACACCAAGGACCGGGTC 642
DB 19 CTTCACCTCGGCCCGGTC 1

RESULT 657
AAZ45100/C
ID AAZ45100 standard; DNA; 19 BP.

XX
AC AAZ45100;
XX
DT 28-FEB-2000 (first entry)
XX
DE Forward PCR primer for sequencing UGT1 exon 1G polymorphisms 31-32.
XX
KW Uridine diphosphate-glucuronosyltransferase 1; UGT1; polymorphism; probe;
KW glucuronic acid; Crigler-Najjar syndrome; Gilbert syndrome; jaundice;
KW unconjugated hyperbilirubinaemia; drug metabolism; transgenic animal;
KW pharmacogenetic screening; diagnose; PCR primer; ss.
XX
OS Synthetic.
XX
PN Homo sapiens.
XX
PD WO957322-A2.
XX
PF 11-NOV-1999.
XX
PR 04-MAY-1999; 99WO-US009702.
XX
PR 07-MAY-1998; 98US-0084807P.
XX
PA (AXYS-) AXYS PHARM INC.
XX
PI Penny L, Galvin M;
XX
DR WPI; 2000-052981/04.
XX
PT New nucleic acid representing polymorphisms in the human uridine
PT diphosphate glucuronyltransferase gene, used for diagnosis and evaluation
PT of drug metabolism.
XX
PS Example; Page 19; 63pp; English.
XX
CC Primers AAZ45074-Z45109 are used to sequence the human uridine
CC diphosphate-glucuronosyltransferase 1 (UGT1) exon polymorphism sequences.
CC The UGTs are a family of enzymes that catalyse the glucuronic acid
CC conjugation of a wide range of endogenous and exogenous substrates
CC including phenols, alcohols, amines and fatty acids. Many of the
CC reactions catalysed by UGTs result in toxic substances being converted to
CC compounds which are more water soluble and are excreted. The invention
CC relates to and identifies UGT1 polymorphisms (AAZ45004-Z45041). The
CC polymorphism sequences are useful as probes for detecting UGT1 locus
CC polymorphisms, indicative of altered UGT1 expression or activity. These
CC polymorphisms are associated with Crigler-Najjar and Gilbert syndromes
CC (unconjugated hyperbilirubinaemia) and drug metabolism. The genotyping of
CC the UGT1 gene is used to predict the rate of metabolism of UGT1
CC substrates, possible drug-drug interactions and adverse side effects
CC (i.e. to optimize drug dosage), and to screen for diseases caused by
CC exposure to toxins and to study the effects of polymorphisms on enzymatic
CC activity. The UGT1 sequences, including polymorphisms, can also be used
CC to produce the corresponding protein (or its fragments) or to generate
CC transgenic animals or modified cells e.g. for pharmacogenetic screening
CC
XX Sequence 19 BP; 4 A; 1 C; 5 G; 9 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 19;
Best Local Similarity 84.2%; Pred. No. 8.1e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1780 ATTAGCAAACTCTGAAA 1798
DB 19 ATTAACAACACTCTGCAA 1

RESULT 658
AACT73121/C
ID AACT73121 standard; DNA; 19 BP.
XX
AC AACT73121;
XX
DT 02-FEB-2001 (first entry)
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XX Forward primer #13 used in multiplexing PCR/SBE assay.
XX
XX
XX Oligonucleotide array; genotyping; single base extension reaction; SBE;
XX PCR primer; polymorphic locus; single nucleotide polymorphism; ss.
XX
XX Unidentified.
XX
XX WO200058516-A2.
XX
XX 05-OCT-2000.
XX
XX 27-MAR-2000; 2000WO-US008069.
XX
XX 26-MAR-1999; 99US-0126473P.
XX PR 23-JUN-1999; 99US-0140359P.
XX
XX (WHEED ) WHITEHEAD INST BIOMEDICAL RES.
XX (AFPPY-) AFPPYMETRIX INC.
XX
XX Fan J, Hirschhorn JN, Huang X, Kaplan P, Lander ES, Lockhart DJ,
XX Ryder T, Sklar P;
XX WPI; 2000-656171/63.
XX
XX Universal array of oligonucleotides tags attached to a solid substrate
XX along with locus-specific tagged oligonucleotides useful in genotyping
XX using single base extension reactions.
XX
XX Example 7; Page 49; 70pp; English.
XX
XX The present invention relates to an oligonucleotide array comprising
XX oligonucleotide tags fixed to a solid substrate. The oligonucleotide
XX array is useful for genotyping a nucleic acid sample at one or more loci
XX via single base extension (SBE) reactions. A pair of primers is used to
XX amplify a polymorphic locus in a sample e.g. a single nucleotide
XX polymorphism (SNP). The present sequence is one of the primers used in
XX the method of the present invention to amplify a polymorphic sample. The
XX amplified nucleic acid product is then used as a template in a SBE
XX reaction with an extension primer. The SBE reaction products are used to
XX form the oligonucleotide array
XX
XX
XX Sequence 19 BP; 2 A; 7 C; 4 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 14.2; DB 1; Length 19;
XX Best Local Similarity 84.2%; Pred. No. 8.1e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX 1133 AGTACCTGTGAGAAGATCAA 1151
XX ||||| |||||
XX 19 AGTACCTGTGACGACGCGA 1
XX
XX
XX RESULT 659
XX ID AAH58499/c
XX AAH58499 standard; DNA; 19 BP.
XX
XX AAH58499;
XX
XX 10-SEP-2001 (first entry)
XX
XX Cell-cycle dependent kinase cdk8 ribozyme binding site SEQ ID NO:923.
XX
XX Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
XX recognition site; target; ribozyme binding site; eye disease; vulnerary;
XX proliferative disease; skin disease; psoriasis; diabetic retinopathy;
XX cytokine; inflammatory; cell-cycle dependent kinase; cyclin; MMP;
XX matrix metalloproteinase; growth factor; redurcase; scarring; cytostatic;
XX antiproliferic; dermatological; antiseborrheic; antidiabetic; vinucide;
XX antistickling; ophthalmological; keratolytic; gene therapy; viral wart;
XX atopic dermatitis; actinic keratosis; squamous cell carcinoma;
XX basal cell carcinoma; seborehthic wart; vitreoretinopathy; scar;
XX sickle cell retinopathy; ss.
XX

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KX		XX	Homo sapiens.
OS		XX	Synthetic.
PX		XX	MO200130362-A2.
XX		XX	
XX		XX	03-MAY-2001.
PD		XX	
PF		XX	26-OCT-2000; 2000WO-US029500.
PR		XX	26-OCT-1999; 99US-0161532P.
PA		XX	(IMMU-) IMMUSOL INC.
PX		XX	
PI		XX	Robbins JM, Tritz R;
XX		XX	
DR		XX	WPI; 2001-300427/31.
PT		XX	Treating proliferative skin or eye diseases and scarring, using ribozymes
PT		XX	that cleave RNA encoding cytokines involved in inflammation, matrix
PT		XX	metalloproteinases, growth factors and cell-cycle dependent kinases.
PX		XX	
PS		XX	Example 1; Page 139; 408pp; English.
CC		XX	The present invention describes a method for treating a proliferative
CC		XX	skin or eye disease and scarring. The method involves administering a
CC		XX	ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC		XX	inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC		XX	dependent kinase, growth factor or a reductase, or administering a
CC		XX	nucleic acid molecule (II) comprising a promoter operably linked to a
CC		XX	nucleic acid segment encoding (I). (I) can have antiporiatic,
CC		XX	dermatological, cytostatic, antiseborrheic, antidiabetic, antistickling,
CC		XX	ophthalmological, vulnerary, keratolytic and virucide activities, and
CC		XX	cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC		XX	in gene therapy. (I) and (II) are useful for treating proliferative skin
CC		XX	diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC		XX	squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC		XX	also be used for treating proliferative eye diseases such as diabetic
CC		XX	retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC		XX	prematurity, and retinal detachment, and for treating and preventing
CC		XX	scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC		XX	scar. AAHS7577 to AAH62099 represent sequences used in the
CC		XX	exemplification of the present invention
SC		XX	Sequence 19 BP; 6 A; 4 C; 3 G; 6 T; 0 U; 0 Other;
			Query Match 0.7%; Score 14.2; DB 1; Length 19;
			Best Local Similarity 84.2%; Pred. No. 8.1e+02;
			Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0
OY			420 AAGTCCTGTGAAACTTAT 438
Dd			19 AAGCCTGTGAAACTTGAT 1
			RESULT 660
ID			AAHS8974/C
XX			AAHS8974 standard; DNA, 19 BP.
AC			AAHS8974;
XX			
DT			10-SEP-2001 (first entry)
DE			Cdk-we-hu ribozyme binding site SEQ ID NO:1398.
XX			
XX			Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KM			recognition site; target; ribozyme binding site; eye disease; vulnerary;
KM			proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KM			cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KM			matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KM			antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KM			antistickling; ophthalmological; keratolytic; gene therapy; viral wart;
KM			atopic dermatitis; actinic keratosis; squamous cell carcinoma;

XX	Nye JM, Li Y, Sandrasegura A, Katz E, Pabalan U, Aguilar D;
PI	Miller SW, Tang L, Shahabuddin S;
XX	WPI; 2003-229219/22.
XX	
PT	Pharmaceutical composition for treating ailments associated with impaired
PT	respiration, has oligo(s) antisense to specific gene(s) or its
PT	corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT	ubiquinone.
PS	
XX	Disclosure; SEQ ID NO 10730; 872pp; English.
XX	
CC	The invention relates to a novel pharmaceutical composition, which has a
CC	first active agent comprising an oligonucleotide antisense to the
CC	initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC	5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC	junctions of genes encoding a polypeptide associated with lung and/or
CC	nasal airway dysfunction and a second active agent comprising an
CC	antiinflammatory steroid and ubiquinone. A composition of the invention
CC	has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC	immunosuppressive, and cytostatic activity. The composition may have a
CC	use in antisense gene therapy. The composition is useful for treating or
CC	preventing a respiratory, lung or malignant disease or condition, also
CC	for enhancing the prophylactic or therapeutic respiratory effect of an
CC	antiinflammatory steroid in a subject, for reducing or depleting levels
CC	of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC	receptor, producing bronchodilation, increasing levels of ubiquinone or
CC	lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC	lung inflammation, lung allergies, or a respiratory disease or condition.
CC	Note: The sequence data for this patent is not represented in the printed
CC	specification, but was obtained in electronic format directly from WIPO
CC	at ftp.wipo.int/pub/published_pct_sequences
XX	
SEQ	Sequence 19 BP: 0 A; 6 C; 7 G; 6 T; 0 U; 0 Other;
	Query Match 0.7%; Score 14.2; DB 1; Length 19;
	Best Local Similarity 84.2%; Pred. No. 8.1e+02;
	Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY	1636 GGGACGAAACCAAGCCCC 1654
Db	19 GAGCCGAAAGCCAGGCC 1
	RESULT 663
	ABZ95279
ID	ABZ95279 standard; DNA; 19 BP.
XX	
AC	ABZ95279;
XX	
DT	17-OCT-2003 (first entry)
XX	
DE	Human IL-5 antisense fragment no.1143.
XX	
KW	Human; antisense; lung dysfunction; nasal airway dysfunction;
KW	antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW	antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW	antisense gene therapy; respiration; lung; adenosine sensitivity;
KW	adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW	lung inflammation; respiratory disease; ds.
XX	
OS	Homo sapiens.
XX	
PN	WO200285308-A2.
XX	
PD	31-OCT-2002.
XX	
PF	23-APR-2002; 2002WO-US013135.
XX	
PR	24-APR-2001; 2001US-0286137P.
XX	
PA	(EPTG-) EPIGENESIS PHARM INC.

XX	Nye JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI	Miller S, Tang L, Shahabuddin S;
DR	WPI; 2003-229219/22.
XX	
PT	Pharmaceutical composition for treating ailments associated with impaired
PT	respiration, has oligo(s) antisense to specific gene(s) or its
PT	corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
XX	ubiquinone.
PS	
XX	Disclosure; SEQ ID NO 10521; 872pp; English.
CC	
CC	The invention relates to a novel pharmaceutical composition, which has a
CC	first active agent comprising an oligonucleotide antisense to the
CC	initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC	5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC	junctions of genes encoding a polypeptide associated with lung and/or
CC	nasal airway dysfunction and a second active agent comprising an
CC	antiinflammatory steroid and ubiquinone. A composition of the invention
CC	has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC	immunosuppressive, and cyostatic activity. The composition may have a
CC	use in antisense gene therapy. The composition is useful for treating or
CC	preventing a respiratory, lung or malignant disease or condition, also
CC	for enhancing the prophylactic or therapeutic respiratory effect of an
CC	antiinflammatory steroid in a subject, for reducing or depleting levels
CC	of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC	receptor, producing bronchodilation, increasing levels of ubiquinone or
CC	lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC	lung inflammation, lung allergies, or a respiratory disease or condition.
CC	Note: The sequence data for this patent is not represented in the printed
CC	specification, but was obtained in electronic format directly from WIPO
CC	at ftp.wipo.int/pub/published_pct_sequences
XX	
SO	Sequence 19 BP; 0 A; 9 C; 1 G; 9 T; 0 U; 0 Other;
QY	
Query Match	0.7%; Score 14.2; DB 1; Length 19;
Best Local Similarity	84.2%; Pred. No. 8.1e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0	
DG	
1980 CCCTCTGTCGTGCTTCTCC 1998	
1 CTCTCGTCTTTCTTCTCC 19	
RESULT 664	
AAD53381	
ID AAD53381 standard; DNA; 19 BP.	
AC AAD53381;	
DT 28-MAY-2003 (first entry)	
XX	
DE Mouse bmf DNA specific RT-PCR primer #2.	
XX	
Bcl-2 modifying factor; BME; apoptosis; cell death; prophylaxis; cancer;	
KM autoimmune disease; cytotoxic condition; gamma-irradiation; chemotherapy;	
KM AIDS; acquired immuno deficiency syndrome; viral infection; ischaemia;	
KM myocardial infarction; cytosstatic; immunosuppressive; vitruicide; cardiant;	
XX vasotropic; mouse; reverse transcription; Rf-PCR; primer; ss.	
OS Mus sp.	
PN WO200297094-A1.	
PD 05-DEC-2002.	
PF 30-MAY-2002; 2002WO-AU000693.	
PR 30-MAY-2001; 2001AU-00005351.	
PA (HALL-) HALL INST MEDICAL RES WALTER & ELIZA.	
XX	

PI Strasser A, Puthalakath H, Villunger A, Coultas L, Beaumont J,
 PI O'Reilly LA, Huang DCS;
 XX WPI; 2003-156796/15.
 DR
 XX
 PT Novel Bcl-2 modifying factor and polynucleotide encoding it, useful for
 PT modulating apoptosis in mammalian cells and treating cancer, autoimmune
 PT disorders, viral infections and degenerative diseases.
 XX
 PS Example 3; Col 89; 49pp; English.
 XX
 CC The invention relates to novel Bcl-2 modifying factor (Bmf) proteins and
 CC polynucleotides encoding such proteins. Sequences of the invention are
 CC useful for modulating apoptosis in a mammal in particular human and also
 CC for treating humans by modulating expression of bmf or activity of Bmf.
 CC They are useful for detecting an interactive molecule (in particular an
 CC antibody). Bmf sequences are useful as screening tools for therapeutic
 CC agents capable of modulating physiological cell death or survival and/or
 CC modulating cell cycle entry. They are also useful in screening for agents
 CC which ameliorate symptoms of diseases caused by defects in apoptosis or
 CC which specifically promote apoptosis of target cells. Increased bmf
 CC expression or Bmf activity is useful for the treatment or prophylaxis in
 CC conditions such as cancer and deletion of autoreactive lymphocytes in
 CC autoimmune disease. Decreased bmf expression or Bmf activity is useful in
 CC regulating inhibition or prevention of cell death or degeneration such as
 CC under cytotoxic conditions during for e.g. gamma-irradiation and
 CC chemotherapy or during HIV/AIDS or other viral infections, ischaemia or
 CC myocardial infarction. Pharmaceutical compositions of the invention are
 CC useful in therapy or prophylaxis in relation to cancer, degenerative
 CC diseases, autoimmune disorders, viral infections and for germ cell
 CC regulation. The present sequence is mouse bmf DNA specific RT-PCR primer.
 CC This sequence is used in the exemplification of the invention
 CC
 SQ Sequence 19 BP; 8 A; 4 C; 6 G; 1 T; 0 U; 0 Other;
 XX
 QY
 DB 705 CGGGGCTGGCAAGGCAAG 723
 1 CAGAGCTGCACAAAGGCAAG 19
 XX
 RESULT 665
 ADG98525/C
 ID ADG98525 standard; DNA; 19 BP.
 AC ADG98525;
 XX
 DT 01-JAN-2004 (first entry)
 XX
 DE PA1102 polymorphism marker PCR primer B primer seq.
 XX
 KW low bone mineral density; BMD; bone damage; polymorphism; osteoporosis;
 KW single nucleotide polymorphism; SNP; PCR primer; ss; human.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN WO2003054218-A2.
 XX
 PD 03-JUL-2003.
 XX
 PF 19-DEC-2002; 2002WMO-US040948.
 XX
 PR 20-DEC-2001; 2001US-0342711P.
 PR 04-NOV-2002; 2002US-0423559P.
 XX
 PA (INCY-) INCYTE GENOMICS INC.
 XX
 PI Jones KA, Valdes A, Townley DJ, Mangion J, Galwey N, Bennett S,
 PI McKay I, Schafer A;

XX
 DR WPI; 2003-559156/52.
 XX
 PT Determining whether an individual is predisposed to susceptibility to low
 PT bone mineral density (BMD) and/or bone damage, involves identifying
 PT polymorphisms in associated genes.
 XX
 PS Example 6; Page 239; 246pp; English.
 XX
 CC The present invention describes a method of determining whether an
 CC individual is predisposed to susceptibility to low bone mineral density
 CC (BMD) and/or bone damage comprising identifying whether the individual
 CC has at least one polymorphism in a polynucleotide encoding a protein,
 CC where the polynucleotide is one of 81 200-500 nucleotide sequences (S1',
 CC see ADG9825 to ADG98315). An agent identified in an method from the
 CC present invention which can be used for the prevention or treatment of a
 CC disease resulting in susceptibility to low BMD and/or bone damage is
 CC useful in the manufacture of a medicament for use in modulating the
 CC susceptibility to low BMD and/or bone damage. The disease associated with
 CC low BMD and/or bone damage is osteoporosis. The present PCR primer
 CC sequence is used in the exemplification of the present invention.
 XX
 SQ Sequence 19 BP; 4 A; 4 C; 6 G; 5 T; 0 U; 0 Other;
 XX
 QY
 DB 534 CTTGGCATTCTGGAACTG 552
 19 CTACGACATCTGGAACGTG 1
 XX
 RESULT 666
 AAQ42952/C
 ID AAQ42952 standard; DNA; 20 BP.
 AC AAQ42952;
 XX
 DT 25-MAR-2003 (revised)
 DT 08-SEP-1993 (first entry)
 XX
 DE Antisense PCR primer to determine MMR mRNA levels.
 XX
 KW Macrophage mannose receptor; Biogel-bead elicited peritoneal macrophages;
 KW BgPM, interleukin 4, IL-4; gamma interferon; gIFN; amplification;
 KW mannosylated pathogens; Candida; Pneumocystis; ss.
 XX
 OS Mus musculus.
 OS
 PN WO9309797-A1.
 XX
 PD 27-MAY-1993.
 XX
 PF 13-NOV-1992; 92WMO-GB002110.
 XX
 PR 15-NOV-1991; 91GB-00024347.
 XX
 PA (ISIS-) ISIS INNOVATION LTD.
 XX
 PI Gordon S, Stein M, Keshav S;
 XX
 DR WPI; 1993-182237/22.
 XX
 PT Treatment of macrophage(s) with interleukin-4 - to alter mannose
 PT receptors activity; used to treat infections involving mannosylated
 PT pathogens.
 XX
 PS Disclosure; Page 6; 24pp; English.
 XX
 CC The sequence shown is one of a primer pair used to amplify (MMR)
 CC macrophage mannose receptors from Biogel-bead elicited peritoneal
 CC macrophages (BgPM). The BgPM are treated with interleukin-4, gamma

CC interferon, gIEN or mock treated and the RNA extracted and reverse
 CC transcribed. PCR was performed and the effect of IL-4, gIEN or no
 CC treatment, on MMR mRNA levels determined by agarose gel electrophoresis.
 CC Similar experiments were performed using TNF and lysozyme specific
 CC primers to determine if the expression of these proteins was altered by
 CC IL-4 or gIEN. IL-4 was found to increase MMR mRNA levels (no change was
 CC seen in any other experiments), thus IL-4 may be used to alter the
 CC mannose receptor activity of macrophages and may be used to treat
 CC infections caused by mannoseylated pathogens, e.g. Candida spp. or
 CC Pneumocystis carinii. See also AAQ42951-6. (Updated on 25-MAR-2003 to
 CC correct PN field.)
 XX
 SQ Sequence 20 BP; 3 A; 8 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 567 GAGGGTGCCTCATTTGAC 585
 Db 19 GAGGGTGGGTACTAATAC 1

RESULT 667
 AAQ70645
 ID AAQ70645 standard; DNA; 20 BP.

XX AAQ70645;

XX 25-MAR-2003 (revised)

DT 22-FEB-1995 (first entry)

XX NPH cDNA RT-PCR forward primer.

XX NFh; neurofilament; GFAP; glial filament acidic protein; RT-PCR;

XX reverse transcription; polymerase chain reaction; primer; amplification;
 KW neuroblast; neuron; trophic factor; Alzheimer; Parkinson; Huntington;
 KW stroke; spinal cord; ss.

XX Synthetic.

XX WO9416059-A1.

XX 21-JUL-1994.

XX 05-JAN-1994; 94WO-US000185.

XX 06-JAN-1993; 93US-00001543.

XX 03-NOV-1993; 93US-00147843.

XX (REGC) UNIV CALIFORNIA.

XX Gage FH, Ray J;

XX WPI; 1994-249207/30.

XX Producing neuroblast(s) by growing neuronal cells in serum free medium -
 PT contg. a trophic factor, useful, by transplantation, for treating
 PT neuronal disease and for screening cpds. for pharmacological activity.

XX Example 7; Page 42; 71pp; English.

XX The presence of NFh and GFAP in Fisher rat hippocampus cultured neurons
 CC was examined by RT-PCR with RNA obtained from the cells. The primers
 CC given in AAQ70645-46 were used to identify NFh, and those in AAQ70647-48
 CC to identify GFAP. (Updated on 25-MAR-2003 to correct PN field.)

XX Sequence 20 BP; 7 A; 3 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 247 GAGGAGATGACCAAGTACC 265
 Db 1 GAGGAGATACTCAGTACC 19

RESULT 668
 AAT27662

ID AAT27662 standard; DNA; 20 BP.

XX AAT27662;

XX 16-JUL-1996 (first entry)

XX BRSV F protein mRNA probe, BRSV 884-903.

XX Polymerase chain reaction; PCR; amplify; primer; detection;

KW Bovine Respiratory Syncytial Virus; BRSV; fusion protein; F protein;

KW reverse transcription; probe; F1 subunit; BRSV strain 391-2;

KW BRSV 884-903; cattle; nasopharyngeal aspirate; respiratory secretion;

KW lung tissue; human RSV; ss.

XX Synthetic.

XX US5424189-A.

XX 13-JUN-1995.

XX 05-MAR-1993; 93US-00029327.

XX 05-MAR-1993; 93US-00029327.

XX (UNIV) UNIV KANSAS STATE RES FOUND.

XX Oberst RD, Hays MP;

XX WPI; 1995-223689/29.

XX Detecting bovine respiratory syncytial virus by RT-PCR and hybridisation
 PT - is rapid, sensitive and selective, also new primers and probes for the
 PT process.

XX Claim 1; Col 7; 6pp; English.

XX The sequences given in AAT27660-61 are primers which were used in the
 CC method of the invention for the detection of Bovine Respiratory Syncytial
 CC Virus (BRSV). These primers amplify DNA reverse transcribed from the
 CC fusion (F) protein mRNA. The amplification product is then detected using
 CC the probe sequence given in AAT27662. The primers amplify a 381 bp
 CC fragment (bases 741-1123) of the F1 subunit of the BRSV strain 391-2 F
 CC protein mRNA. The probe, BRSV 884-903, hybridises to positions 884-903 of
 CC the amplified DNA. The method is used for specific detection of BRSV in
 CC cattle using e.g. nasopharyngeal aspirates, respiratory secretions or lung
 CC tissue as test material. The method allows differentiation between BRSV
 CC and human RSV

XX Sequence 20 BP; 7 A; 2 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1483 GGGGTCAAGGAGGAGGTCA 1501
 Db 1 GTGGTCAAGAGAGGAGGTCA 19

RESULT 669

AAQ91250

ID AAQ91250 standard; DNA; 20 BP.

XX AAQ91250;

XX 10-JUL-1996 (first entry)

```

XX DE EAA5 receptor PCR primer 7-16.
XX KW Glutamate receptor; EAA5 receptor; excitatory amino acid; CNS receptor;
XX KW RNA editing; polymerase chain reaction; PCR; primer; ss.
XX OS Synthetic.
XX PN WO9517508-A2.
XX XX
XX PD 29-JUN-1995.
XX PF 21-DEC-1994; 94WO-CA000705.
XX XX
XX PR 23-DEC-1993; 93US-00172188.
XX XX
XX PA (ALIX ) ALLELIX BIOPHARMACEUTICALS INC.
XX FI Kamboj R, Nutt S;
XX XX
XX DR WPI; 1995-240670/31.
XX PT Identification of human CNS receptor ligand - and identification of
XX PT agents that modulate editing of human CNS receptors.
XX PS Example 9; Page 35; 59pp; English.
XX CC PCR primers (AAQ91246-50) were used to amplify human glutamate receptor
XX CC EAA5 genomic DNA and cDNA. Examination of the PCR products showed that
XX CC the cDNA sequence differed from the genomic sequence at 2 places in the
XX CC transmembrane domain-coding region, resulting in S310A and R532Q
XX CC substitutions. These variations were attributed to RNA editing involving
XX CC T to G and A and A substitutions. Similar RNA editing was found for EAA3
XX CC (see also AAQ91231) and EAA4 (see also AAQ91232) genes
XX SQ Sequence 20 BP; 6 A; 4 C; 8 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1242 TGGCGATGACGACGAGAC 1260
DB 2 TGGCGATGACGAGAGGAC 20

RESULT 670
AA741088
ID AA741088 standard; DNA; 20 BP.
AC AA741088;
XX XX
XX DT 03-DEC-1996 (first entry)
XX DE
XX DE Human gene signature HUMGS01461-derived anti-sense primer.
XX KW Gene signature; messenger RNA; mRNA; relative abundance; frequency;
XX KW human; cloning; mapping; non-biased library; diagnosis; detection;
XX KW cell typing; abnormal cell function; primer; PCR; amplification;
XX KW polymerase chain reaction; ss.
XX OS Synthetic.
XX OS
XX PN WO9514772-A1.
XX XX
XX PD 01-JUN-1995.
XX PF 11-NOV-1994; 94WO-JP001916.
XX XX
XX PR 12-NOV-1993; 93JP-00355504.
XX XX
XX PA (MATS/) MATSUBARA K.
XX PA (OKUB/) OKUBO K.

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XX PI Matsubara K, Okubo K;
XX DR WPI; 1995-206931/27.
XX PT Single-stranded DNA for identifying gene signatures - isolated from 3'-
XX PT directed human cDNA library that reflects relative abundance of corresp.
XX PT mRNA in specific human tissues.
XX XX
XX PS Example 7; Fig 7; 2245pp; Japanese.
XX XX
XX CC Primers T41001-T41382 are derived from novel human gene signature (GS)
XX CC sequences which did not match with sequences deposited in Genbank release
XX CC 76. The GS sequences (T19001-T26837) were obtained from 3'-directed cDNA
XX CC libraries prepared from various human tissues; synthesis of cDNA was
XX CC initiated from the 3'-end of mRNA by using poly(T) as the sole primer.
XX CC Each library is constructed so as to reflect accurately the relative
XX CC abundance of different mRNAs in the particular tissue from which it was
XX CC derived. The appearance frequency of a given GS in a cDNA library can be
XX CC determined (esp. using primers and probes derived from the GS sequences)
XX CC as a means of diagnosing abnormal cell function or for recognising
XX CC different cell types. The primers T41087-8 amplify clone pm1160 which
XX CC comprises the GS HUMGS001461 (T20461), located on chromosome 5
XX SQ Sequence 20 BP; 6 A; 2 C; 4 G; 8 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1757 GAAAGGGATACCTTTTATGC 1775
DB 2 GAAATGGATGCTTTTATTC 20

RESULT 671
AAQ95469/C
ID AAQ95469 standard; DNA; 20 BP.
XX XX
XX AC AAQ95469;
XX XX
XX DT 14-FEB-1996 (first entry)
XX DE
XX DE Primer A5 (Group 4, set A) for a human chromosomal marker.
XX KW primer; polymerase chain reaction; PCR; linkage study; locus;
XX KW microsatellite marker sequence; automated genotyping; allele;
XX KW polymorphism; detection; Homo sapiens; ss.
XX OS Synthetic.
XX PN WO9515400-A1.
XX XX
XX PD 08-JUN-1995.
XX PF 05-DEC-1994; 94WO-US013945.
XX XX
XX PR 03-DEC-1993; 93US-00160837.
XX XX
XX PA (UYJO ) UNIV JOHNS HOPKINS.
XX PI Levitt RC;
XX XX
XX DR WPI; 1995-215278/28.
XX PT Kit for automated genotyping contg. pairs of PCR primers - designed to
XX PT amplify polymorphic nucleotide repeat sequences, arranged in sets each
XX PT with a characteristic fluorescence label, useful e.g. in detection of
XX PT disease related genetic rearrangement.
XX PS Disclosure; Fig 7D-2; 104pp; English.
XX XX
XX CC The method aims to provide a collection of highly reproducible

```

CC microsatellite marker sequences (MMS) at approx. 10-50 cm intervals
 CC throughout the human genome which can be detectably labelled. The MMS are
 CC polymorphic, simple sequence repeats and can be used in automated
 CC genotyping, esp. fluorescence-based. The primers correspond to the unique
 CC DNA sequence surrounding each marker, and PCR is used to detect each
 CC polymorphism. When the MMS show considerable polymorphism (ie. a
 CC difference in the number of repeats) between individuals, the markers can
 CC be particularly informative. The MMS can be ideal for linkage studies.
 CC Kits comprise at least 4 groups, of at least 3 sets, each comprising
 CC labelled primers for PCR amplification of the DNA. Group 4 primer pairs
 CC are shown in AAQ95465-480 and AAQ95559-590. The chromosomal markers,
 CC published size range of the allele and degree of heterozygosity in the
 CC population for the markers covered by these primer pairs are not given in
 CC the specification
 CC
 XX SQ Sequence 20 BP; 5 A; 3 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1798 ATGCCAAGTGCCTGCTTAG 1816
 || |||| |||| |||| ||||
 Db 20 ATACCAACTGCCTACTTAG 2

RESULT 672
 AAT08139/c
 ID AAT08139 standard; DNA; 20 BP.

XX AC AAT08139;
 XX DT 10-MAY-1996 (first entry)
 XX DE Primer SER-3.
 XX KW Protease; hyperthermostable; thermostability; primer; PCR;
 XX KW polymerase chain reaction; Pyrococcus furiosus; ss.
 XX OS Synthetic.
 XX PN WO9534645-A1.
 XX PD 21-DEC-1995.
 XX PF 05-JUN-1995; 95WO-JP001095.
 XX PR 13-JUN-1994; 94JP-00130236.
 XX PR 26-JUL-1994; 94JP-00173912.
 XX PA (TAKI) TAKARA SHUZO CO LTD.
 XX PI Mitta M, Yamamoto K, Morishita M, Asada K, Tsunasawa S, Kato I;
 XX WPI; 1996-049674/05.
 XX PT Pyrococcus furiosus hyperthermostable protease gene - useful for
 XX PT recombinant prodn. of hyperthermostable protease.
 XX PS Example 3; Page 68; 85pp; Japanese.
 XX CC Primers TCE-2, TCE-4, SER-3, SER-1, SER-3 and TCE-6R (AAT08135- 40,
 XX CC respectively) are used for the PCR amplification of the protease gene
 XX CC (AAT08141) of Pyrococcus furiosus. The gene is useful for recombinant
 XX CC prodn. of the hyperthermostable protease (AAR87007)
 XX SQ Sequence 20 BP; 9 A; 4 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1119 CCAGAACACGATGAGTAC 1137
 |||| |||| |||| |||| ||||
 Db 1 CCAGAACAGGATAGTAC 19

RESULT 674
 AAT32543
 ID AAT32543 standard; DNA; 20 BP.
 XX AC AAT32543;
 XX DT 02-DEC-1996 (first entry)
 XX DE Primer for exon 16 of the calpain large subunit 1 gene.
 XX KW Calpain; subunit; calcium; protease; mutation; treatment; detection;
 XX KW identification; diagnosis; limg girdle muscular dystrophy; LGMD2;
 XX KW calcium activated neutral protease; CAMP; ss.
 XX OS Synthetic.
 XX PN WO9616175-A2.

Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1119 CCAGAACACGATGAGTAC 1137

Db 20 CCAGAACAGGATAAGTAC 2
 |||| |||| |||| |||| ||||

RESULT 673
 AAT08136
 ID AAT08136 standard; DNA; 20 BP.

XX AC AAT08136;
 XX DT 10-MAY-1996 (first entry)
 XX DE Primer TCE-4.
 XX KW Protease; hyperthermostable; thermostability; primer; PCR;
 XX KW polymerase chain reaction; Pyrococcus furiosus; ss.
 XX OS Synthetic.
 XX PN WO9534645-A1.
 XX PD 21-DEC-1995.
 XX PF 05-JUN-1995; 95WO-JP001095.
 XX PR 13-JUN-1994; 94JP-00130236.
 XX PR 26-JUL-1994; 94JP-00173912.
 XX PA (TAKI) TAKARA SHUZO CO LTD.
 XX PI Mitta M, Yamamoto K, Morishita M, Asada K, Tsunasawa S, Kato I;
 XX WPI; 1996-049674/05.
 XX PT Pyrococcus furiosus hyperthermostable protease gene - useful for
 XX PT recombinant prodn. of hyperthermostable protease.
 XX PS Example 3; Page 68; 85pp; Japanese.
 XX CC Primers TCE-2, TCE-4, SER-3, SER-1, SER-3 and TCE-6R (AAT08135- 40,
 XX CC respectively) are used for the PCR amplification of the protease gene
 XX CC (AAT08141) of Pyrococcus furiosus. The gene is useful for recombinant
 XX CC prodn. of the hyperthermostable protease (AAR87007)
 XX SQ Sequence 20 BP; 9 A; 4 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1119 CCAGAACACGATGAGTAC 1137
 |||| |||| |||| |||| ||||
 Db 1 CCAGAACAGGATAGTAC 19

RESULT 674
 AAT32543
 ID AAT32543 standard; DNA; 20 BP.
 XX AC AAT32543;
 XX DT 02-DEC-1996 (first entry)
 XX DE Primer for exon 16 of the calpain large subunit 1 gene.
 XX KW Calpain; subunit; calcium; protease; mutation; treatment; detection;
 XX KW identification; diagnosis; limg girdle muscular dystrophy; LGMD2;
 XX KW calcium activated neutral protease; CAMP; ss.
 XX OS Synthetic.
 XX PN WO9616175-A2.

PD 30-MAY-1996.
 XX
 PF 21-NOV-1995; 95WO-EP004575.
 XX
 PR 22-NOV-1994; 94EP-00402668.
 XX
 PA (ASFR-) ASSOC FR CONTRE MYOPATHIES.
 XX
 PI Beckmann J, Richard I;
 XX
 DR WPI; 1996-268611/27.
 XX
 PT Human novel Calpain large subunit 1 gene encoding a calcium dependent
 PT protease - used to develop prods. for the diagnosis and treatment of limb
 PT -girdle muscular dystrophy 2 disease.
 XX
 PS Claim 16; Page 14; 66pp; English.
 XX
 CC The calpain large subunit 1 gene located on chromosome 15 codes for a
 CC calcium activated neutral protease (CANP3) belonging to the calpain
 CC family. Mutations in the gene induce limb-girdle muscular dystrophy
 CC (LGMD) 2 disease. The gene, and fragments of it, can be used in the
 CC prevention, treatment, diagnosis and detection of a predisposition to
 CC LGMD2 disease. Fifty primers (AAT32510-59) were used to specifically
 CC amplify the exons and splice junctions of the calpain large subunit 1
 CC gene as well as the regions containing the putative CAT, TATA boxes and
 CC the polyadenylation signal. Two primers (AAT32542, AAT32543) were used to
 CC amplify exon 16 of the gene
 XX
 SQ Sequence 20 BP; 6 A; 6 C; 5 G; 3 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 OY 1784 GACAACTCTGGAATGCC 1802
 DB |||||
 1 GACAACTCTGGGAGGCC 19
 RESULT 675
 AAT65944/c
 ID AAT65944 standard; DNA; 20 BP.
 XX
 AC AAT65944;
 XX
 DT 25-MAR-2003 (revised)
 DT 18-JUN-1997 (first entry)
 XX
 DE Primer #1 to amplify repeat sequence marker Mfd74.
 XX
 KW Polymorphism; repeat sequence; genetic marker; primer; amplification;
 KW PCR; polymerase chain reaction; paternity; maternity; human; pedigree;
 KW linkage analysis; genetic disease; animal; plant; breeding; locus;
 KW hybridisation; chromosome; ds.
 XX
 OS Synthetic.
 XX
 XX US5582979-A.
 XX
 PD 10-DEC-1996.
 XX
 PF 04-APR-1994; 94US-00222177.
 XX
 PR 21-APR-1989; 89US-00341562.
 PR 05-SEP-1991; 91US-00754351.
 XX
 PA (MARS-) MARSHFIELD CLINIC.
 XX
 PI Weber JL;
 XX
 DR WPI; 1997-042299/04.
 XX

PT Detection of polymorphic genetic markers of the form (dC-dA)n(dG-dT)n -
 PT using novel nucleic acid mols. as primers.
 XX
 PS Disclosure; Col 11-12; 186pp; English.
 XX
 CC The invention relates to the isolation of polymorphic repeat sequences
 CC having the sequence (dC-dA)n.(dG-dT)n which can be used as genetic
 CC markers. Primers based on these sequences can be used to detect these
 CC repeats, especially for use in e.g paternity or maternity testing, human
 CC genetic analysis such as linkage analysis of genetic disease, commercial
 CC animal or plant breeding or pedigree analysis. Clones containing the
 CC repeat sequences were isolated by hybridisation of chromosome-specific
 CC phage libraries with a synthetic poly(dC-dA).(dG-dT) probe. Over 100
 CC repeat blocks were isolated. The primers AAT65798-T66047 were used to PCR
 CC amplify the inserts from the isolated clones containing the repeat
 CC sequences. The primers AAT65944-5 were used to amplify the repeat
 CC sequence marker clone Mfd74. (Updated on 25-MAR-2003 to correct PF
 CC field.)
 XX
 SQ Sequence 20 BP; 1 A; 6 C; 3 G; 10 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 OY 1451 AGAAACCAAGGAGGAGAA 1469
 DB |||||
 20 ACAAGCCACAGAGGTGAA 2
 RESULT 676
 AAT69682
 ID AAT69682 standard; DNA; 20 BP.
 XX
 AC AAT69682;
 XX
 DT 06-AUG-1997 (first entry)
 XX
 DE Granzyme B forward PCR primer.
 XX
 KW Paramyxovirus; PMV; treatment; immune response; disorder; screen;
 KW detection; reduction; granzyme B; cytotoxic T lymphocyte; CTL;
 KW natural killer; NK; cell; primer; polymerase chain reaction; PCR;
 KW amplification; reverse transcriptase; analysis; ss.
 XX
 OS Synthetic.
 XX
 XX WO9636738-A1.
 XX
 PD 21-NOV-1996.
 XX
 PF 25-MAR-1996; 96WO-US004091.
 XX
 PR 19-MAY-1995; 95US-00444649.
 XX
 PA (TKBA-) TKB ASSOC LP.
 XX
 PI Kaplan DR;
 XX
 DR WPI; 1997-012105/01.
 XX
 PT Treating immune response disorders with paramyxovirus components - which
 PT inhibit the effector phase of the response, also methods for screening
 PT agents for treating paramyxovirus infection.
 XX
 PS Example 3; Page 44; 79pp; English.
 XX
 CC A paramyxovirus (PMV) component for the treatment of an immune response
 CC related disorder, can be screened by detecting a reduction in the level
 CC of granzyme B mRNA in cytotoxic T lymphocyte (CTL) or natural killer (NK)
 CC cells. The present sequence, a primer for the PCR amplification of
 CC granzyme B DNA, was used for the reverse transcriptase PCR analysis of
 CC granzyme mRNA in CTL and NK cells

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XX
SQ Sequence 20 BP; 6 A; 3 C; 7 G; 4 T; 0 U; 0 Other;
Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1434 AGAAGTCACCGAGGAG 1452
Db 1 AGAAGTCCTGAGAGGTC 19

RESULT 677
AAT79177
ID AAT79177 standard; DNA; 20 BP.
XX
AC AAT79177;
XX
XX
DT 27-FEB-1998 (first entry)
XX
DE Rat neurofilament 200 kDa protein 5'-primer.
XX
XX PCR primer; neurofilament 200 kDa protein; retroviral vector;
KW identification; neurotransmitter; agonist; antagonist; stroke; treatment;
KW Parkinson's; Alzheimer's; Huntington's; disease; rat; ss.
XX
XX Synthetic.
OS Rattus rattus.
OS
XX WO9730168-Al.
XX
XX 21-AUG-1997.
XX
XX 11-FEB-1997; 97WO-US0002013.
XX
XX 20-FEB-1996; 96US-00602203.
XX
XX (REGC ) UNIV CALIFORNIA.
XX
XX Gage FH, Ray J, Hoshimaru M;
XX
XX WPI; 1997-425042/39.
XX
XX Retroviral vector containing regulatable transactivator element and
PT heterologous gene - particularly oncogene for rendering neuronal
PT precursor cells immortal until transactivator is switched off.
XX
XX Example; Page 21; 42pp; English.
XX
XX The present rat neurofilament 200 kDa protein 5'-primer, was used in the
CC development of a novel retroviral vector. The vector comprises a nucleic
CC acid encoding a regulatable transactivator element (RTE), a selectable
CC marker, a heterologous gene and regulatory element in operable linkage
CC and cis-acting elements required for reverse transcription and
CC integration. A recombinant retrovirus produced by transfecting a packing
CC host cell with the vector can be used to immortalise neuronal precursor
CC cells, when the heterologous gene is an oncogene, and induce their
CC differentiation by downregulation of the RTE. The immortalised and
CC differentiated cells can be cultured for study of cell populations,
CC interactions between cells and the effects of neuroactive materials on
CC them, e.g. identification of neurotransmitter agonists or antagonists
CC that are potentially useful as anxiolytics, antidepressants or
CC antipsychotics. When the heterologous gene encodes, e.g. an enzyme
CC important in normal neuronal function, such as tyrosine hydroxylase or
CC choline acetyltransferase, a receptor or a ligand, the cells can be
CC transplanted into the brain or spinal cord to treat Parkinson's,
CC Alzheimer's or Huntington's disease or stroke
XX
SQ Sequence 20 BP; 7 A; 3 C; 7 G; 3 T; 0 U; 0 Other;
Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

XX
SQ Sequence 20 BP; 6 A; 3 C; 7 G; 4 T; 0 U; 0 Other;
Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 247 GAGGAGTACCAAGTACC 265
Db 1 GAGGAGATAACTGAGTACC 19

RESULT 678
AAV52674/C
ID AAV52674 standard; DNA; 20 BP.
XX
AC AAV52674;
XX
XX 21-DEC-1998 (first entry)
XX
DE Hepatocyte nuclear factor 4 alpha gene exon 4 reverse PCR primer.
XX
XX Hepatocyte nuclear factor 4 alpha; HNF-4 alpha; MODY1; human;
KW transcription factor; maturity onset diabetes of the young; TCD14;
KW diabetes; NIDDM; diagnosis; therapy; PCR; primer; ss.
XX
XX Synthetic.
OS Homo sapiens.
OS
XX WO9811254-Al.
XX
XX 19-MAR-1998.
XX
XX 10-SEP-1997; 97WO-US016037.
XX
XX 10-SEP-1996; 96US-0025719P.
XX
XX 02-OCT-1996; 96US-0028056P.
XX
XX 30-OCT-1996; 96US-0029679P.
XX
XX (ARCH-) ARCH DEV CORP.
XX
XX Bell GI, Yamagata K, Oda N, Kaisaki PJ, Furuta H, Menzel S;
XX Horikawa Y;
XX WPI; 1998-271667/24.
XX
XX Isolated nucleic acid encoding hepatocyte nuclear factor 1-alpha and 1-
PT beta - useful for detecting susceptibility for non-insulin dependent
PT diabetes, especially maturity-onset diabetes of the young.
XX
XX Example 3; Page 112; 363pp; English.
XX
XX This is a reverse PCR primer designed for use with a forward primer (see
CC AAV52673) in the PCR amplification of exon 4 and the flanking introns
CC (see AAV52656) of the human hepatocyte nuclear factor-4 alpha (HNF-4
CC alpha) gene (see AAV52687). Mutations of the HNF-4 alpha gene have been
CC identified by amplifying (see AAV52665-86) and sequencing the appropriate
CC exon. The invention concerns the identification of genes responsible for
CC non-insulin dependent diabetes mellitus (NIDDM) for use in diagnostics
CC and therapeutics. It demonstrates that the MODY1 (maturity-onset diabetes
CC of the young) locus is the HNF-4 alpha gene. Analysis of mutations in the
CC HNF-4 alpha gene can be diagnostic for diabetes
XX
XX Sequence 20 BP; 2 A; 11 C; 3 G; 4 T; 0 U; 0 Other;
Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 5 GGAGCCGCGCGGAGGG 23
Db 19 GGAGCAGCTGACGGAGGG 1

RESULT 679
AAT99575
ID AAT99575 standard; DNA; 20 BP.
XX
XX AAT99575;
AC AAT99575;

```


PI Takaku H, Yamamoto N, Kimura T, Takai K, Wada A;
 XX WPI; 1999-620207/53.
 XX
 XX Antisense oligonucleotide-based HIV cofactor inhibitors, as drug
 PT compositions for treatment of HIV infection.
 XX
 XX Claim 6; Page 16; 59pp; Japanese.
 XX
 XX The invention provides HIV cofactor inhibitors that contain
 CC oligonucleotides with a base sequence complementary to the CXCR4 or CCR5
 CC genes. Such inhibitors can be formulated into drug compositions for
 CC prevention or treatment of HIV infection, with inhibition of expression
 CC of CXCR4 or/and CCR5 gene. Sequences AAZ31244-306 represent antisense
 CC oligonucleotides to the CCR5 gene
 XX
 XX Sequence 20 BP; 8 A; 5 C; 5 G; 2 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1255 GAAGACGACCCCTGACAAAGC 1273
 DB 2 GCAGATGACCATGACAAGC 20
 RESULT 682
 AAV84309
 ID AAV84309 standard; DNA; 20 BP.
 XX
 AC AAV84309;
 XX
 XX 12-APR-1999 (first entry)
 DT
 XX Human guanine nucleotide exchange factor Rac-GEF 5' PCR primer.
 DE
 XX Rac-GEF; guanine nucleotide exchange factor; human; cancer; metastasis;
 KW cell proliferation; apoptosis; haemostasis; bone resorption;
 KW clot retraction; morphogenesis; inflammation; therapy; diagnosis; PCR;
 KW primer; ss.
 XX
 XX Synthetic.
 OS
 OS Homo sapiens.
 XX
 PN WO9857990-A2.
 XX
 XX 23-DEC-1998.
 PD
 XX 15-JUN-1998; 98WO-US012391.
 PF
 XX 17-JUN-1997; 97US-0049879P.
 PR
 XX (ONTX-) ONTX PHARM INC.
 PA
 XX Boliag G, Crompton A, North A, Roscoe W, Sharma S;
 PI WPI; 1999-095328/08.
 XX
 XX New isolated Rac-guanine nucleotide exchange factor - used to develop
 PT products for treating conditions involving e.g. cell proliferation (e.g.
 PT cancer), programmed cell death, haemostasis or bone resorption.
 XX
 XX Example 1; Page 29; 62pp; English.
 PS
 CC This 5' primer was used with a 3' primer (see AAV99830) in the PCR
 CC amplification of EST clone #167059 cDNA. This EST clone had been
 CC identified in a database search for Dlb homologues. The 32p labelled PCR
 CC product was used as a probe to screen a human foetal brain Lambda ZAP
 CC cDNA library, yielding a 2.6 kb clone. This clone was used to identify
 CC EST #109922 (see AAV99828) from a human liver cDNA library. The liver-
 CC specific cDNA encodes a human Rac-guanine nucleotide exchange factor,
 CC termed Rac-GEF (see AAW80995). Rac-GEF polypeptides, nucleic acids,

CC ligands and modulators can be used in methods of treating pathological
 CC conditions associated or related to a Ras superfamily GPrase such as Rac,
 CC e.g. to treat cell proliferation (cancer), apoptosis, haemostasis, bone
 CC resorption, etc
 XX
 XX Sequence 20 BP; 3 A; 4 C; 9 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 775 GAGGCCATTTTCAAGCGCG 793
 DB 2 GAGGCCATGTTGAGCTGG 20
 RESULT 683
 AAX57777/c
 ID AAX57777 standard; DNA; 20 BP.
 XX
 AC AAX57777;
 XX
 XX 17-AUG-1999 (first entry)
 DT
 XX Oligonucleotide ISIS#14498 targeted to PP5 gene sequence.
 DE
 XX Gene expression; p21; WAF1; Cip1; cell proliferation; antisense; PP5;
 KW protein phosphatase; inhibitor; cyclin-dependent kinase; CDK; cancer;
 KW hyperproliferative disease; smooth muscle cell; blood vessel; restenosis;
 KW tumour suppressor gene; p53; BRCA1; ss.
 XX
 XX Synthetic.
 OS
 XX WO9927136-A1.
 PN
 XX 03-JUN-1999.
 PD
 XX 20-NOV-1998; 98WO-US024956.
 PF
 XX 20-NOV-1997; 97US-00975127.
 PR
 XX (SALA-) SOUTH ALABAMA MEDICAL SCI FOUND.
 PA
 XX Honkanen RE;
 PI WPI; 1999-357854/30.
 XX
 XX Increasing expression of p21WAF1/Cip1 by inhibiting protein phosphatase.
 PT
 XX Claim 5; Page 43; 67pp; English.
 PS
 CC Expression of p21WAF1/Cip1 is increased in cells, so as to decrease cell
 CC proliferation, by reducing the level of the Ser/Thr protein phosphatase
 CC PP5 protein in the cell by targeting the expression of the PP5 gene with
 CC an antisense oligonucleotide such as AAX57770-X57784. Reduction of PP5
 CC levels induces expression of p21WAF1/Cip1, which is an inhibitor of most
 CC cyclin-dependent kinases and thus of cell growth. The method is
 CC particularly used, therapeutically or prophylactically, in cases of
 CC cancer or other hyperproliferative diseases, e.g. those involving smooth
 CC muscle cells in blood vessels, such as (re)stenosis, particularly where
 CC some defect in tumour suppressor genes (especially p53 or BRCA1) results
 CC in reduced induction of p21WAF1/Cip1
 XX
 XX Sequence 20 BP; 3 A; 8 C; 3 G; 6 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 246 TGAGGAGATGACCAAGTAC 264
 DB 19 TGAGGTGAAGGCCAAGTAC 1

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RESULT 684
AAZ18662
ID AAZ18662 standard; DNA; 20 BP.
XX AC AAZ18662;
XX DT 19-OCT-1999 (first entry)
XX DE ASTH1 gene intron/exon junction sequence.
XX KW ASTH1; asthma; human; chromosome 11p; ASTH1I; ASTH1J; genetic locus;
XX KW therapeutic; immunogen; polymorphism; junction; ss.
XX OS Homo sapiens.
XX PN WO9937809-A1.
XX PD 29-JUL-1999.
XX PF 21-JAN-1998; 98WO-US001260.
XX PR 21-JAN-1998; 98WO-US001260.
XX PA (AXYS-) AXYS PHARM INC.
XX PI Brooks-Wilson AR, Buckler A, Cardon L, Carey AH, Galvin M;
XX PI Miller A, North M;
XX DR WPI; 1999-479058/40.
XX KW Mammalian asthma related genes, useful for diagnosis of a predisposition
XX PT to development of asthma.
XX PS Disclosure; Page 57; 195pp; English.
XX CC The invention identifies a genetic locus ASTH1, associated with asthma,
XX CC mapped to human chromosome 11p. ASTH1I and ASTH1J are genes present
XX CC within the locus, located close to each other on human chromosome 11p.
XX CC and have similar patterns of expression, and common sequence motifs. The
XX CC ASTH1 genes and fragments, encoded protein, genomic regulatory regions
XX CC and anti-ASTH1 antibodies are useful in the identification of individuals
XX CC predisposed to development of asthma, and for the modulation of gene
XX CC activity in vivo for prophylactic and therapeutic purposes. The ASTH1
XX CC protein is useful as an immunogen to raise specific antibodies, in drug
XX CC screening for compositions that mimic or modulate ASTH1 activity or
XX CC expression, including altered forms of ASTH1 protein, and as a
XX CC therapeutic. Sequences AAZ18643-218685 intron/exon junction sequences of
XX CC ASTH1I and ASTH1J genes
XX SQ Sequence 20 BP; 5 A; 4 C; 2 G; 9 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2033 CTTTTCGATGACTACTATTTT 2051
DB 2 CTTTTCGATGACTACTAT 20

RESULT 685
AAZ95708
ID AAZ95708 standard; DNA; 20 BP.
XX AC AAZ95708;
XX DT 13-SEP-1999 (first entry)
XX DE PCR primer used to amplify an ORF of Chlamydia pneumoniae.
XX KW Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
XX KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
XX KW neutralising epitope; PCR primer; ss.

Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 2033 CTTTTCGATGACTACTATTTT 2051
DB 2 CTTTTCGATGACTACTAT 20

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KW neutralising epitope; PCR primer; ss.
XX OS Synthetic.
XX OS Chlamydophila pneumoniae.
XX PN WO9927105-A2.
XX PD 03-JUN-1999.
XX PF 20-NOV-1998; 98WO-IB001890.
XX PR 21-NOV-1997; 97FR-00014673.
XX PR 04-NOV-1998; 98US-0107078P.
XX PA (GEST ) GENSET.
XX PI Griffais R;
XX DR WPI; 1999-357842/30.
XX PT Genome sequence of Chlamydia pneumoniae.
XX PS Page 1769; Disclosure; 1912pp; English.
XX CC AAX91991-X97517 represent PCR primers used to amplify open reading frames
XX CC and other nucleic acid sequences from the genome of Chlamydia pneumoniae
XX CC (see AAX91990). C. pneumoniae causes respiratory disease such as
XX CC pneumonia and bronchitis and is thought to be a contributing factor in
XX CC heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema
XX CC nodosum or pharyngitis. The polypeptides encoded by the open reading
XX CC frames of the C. pneumoniae genome (see AAX34584- AAX35879) can be used
XX CC in immunogenic compositions as vaccines. Vectors containing C. pneumoniae
XX CC nucleotide sequences can also be used as immunogenic compositions,
XX CC especially where the vector directs the expression of a neutralising
XX CC epitope of C. pneumoniae
XX SQ Sequence 20 BP; 7 A; 6 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1349 GGGGCCCGCAAGAACTCTTC 1367
DB 2 GAGGCCGCAAAAATCTTC 20

RESULT 686
AAZ95639
ID AAZ95639 standard; DNA; 20 BP.
XX AC AAZ95639;
XX DT 13-SEP-1999 (first entry)
XX DE PCR primer used to amplify an ORF of Chlamydia pneumoniae.
XX KW Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
XX KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
XX KW neutralising epitope; PCR primer; ss.
XX OS Synthetic.
XX OS Chlamydophila pneumoniae.
XX PN WO9927105-A2.
XX PD 03-JUN-1999.
XX PF 20-NOV-1998; 98WO-IB001890.
XX PR 21-NOV-1997; 97FR-00014673.
XX PR 04-NOV-1998; 98US-0107078P.
XX

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QY 865 GGGGATCGGTTAGTTCCT 883
 ||| ||||| |||||
 Db 1 GGGAAUCGGTTAATCTTCCT 19

RESULT 689
 AAX79190/c
 ID AAX79190 standard; DNA; 20 BP.
 XX
 AC AAX79190;
 XX
 DT 17-AUG-1999 (first entry)
 XX
 DE Human GAPDH gene amplification primer #1.
 XX
 KW Differentiation; human; foetal; chondrocyte; ezrin-like domain; cancer;
 KW Db1 homology domain; pleckstrin homology domain; rheumatoid arthritis;
 KW drug; primer; PCR; amplification; gene expression; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN WO9928458-A1.
 XX
 PD 10-JUN-1999.
 XX
 PF 27-NOV-1998; 98WO-JP005348.
 XX
 PR 27-NOV-1997; 97JP-00342060.
 XX
 PA (CHUS) CHUGAI SEIYAKU KK.
 XX
 PI Kato Y, Kawamoto T, Koyano Y;
 XX
 DR WPI; 1999-371117/31.
 XX
 PT Protein CDEP expressed in differentiated chondrocytes, and gene encoding
 PT it.
 XX
 PS Disclosure; Page 16; 59pp; Japanese.

XX
 CC The invention relates to a protein (CDEP) expressed in differentiated
 CC human foetal chondrocytes, which contains an ezrin-like domain, a Db1
 CC homology (DH) domain and a pleckstrin homology (PH) domain. The nucleic
 CC acid or protein can be used in the investigation and treatment of cancers
 CC and arthritic diseases (including chronic rheumatoid arthritis), or for
 CC screening of candidate anticancer drugs. Primers AAX79184-X79195 were
 CC used to detect levels of expression of CDEP and other control genes in
 CC human tissue. The primers AAX79190-X79191 were used to amplify the gene
 CC for GAPDH (glyceraldehyde-3-phosphate dehydrogenase)
 XX
 SQ Sequence 20 BP; 7 A; 3 C; 8 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1713 TTCCCGTCTTAACTTTGA 1731
 ||||| ||||| |||||
 Db 20 TTCCCGTCTCAGCCTTGA 2

RESULT 690
 AAX60010/c
 ID AAX60010 standard; DNA; 20 BP.
 XX
 AC AAX60010;
 XX
 DT 04-AUG-1999 (first entry)
 XX
 DE Human protein phosphatase 5 antisense oligonucleotide.
 XX
 KW Antisense oligonucleotide; human serine/threonine protein phosphatase;

KW intracellular signalling; cell proliferation; gene expression; mitosis;
 KW hyperproliferation; cancer; smooth muscle cell proliferation;
 KW blood vessel; restenosis; ss.
 XX
 OS Synthetic.
 XX
 PN WO9927134-A1.
 XX
 PD 03-JUN-1999.
 XX
 PF 19-NOV-1998; 98WO-US024824.
 XX
 PR 20-NOV-1997; 97US-00975211.
 XX
 PA (SALA-) SOUTH ALABAMA MEDICAL SCI FOUND.
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Honkanen RE, Dean NM;
 XX
 DR WPI; 1999-347729/29.
 XX
 PT Antisense oligonucleotides against protein phosphatase.

XX
 PS Claim 8; Page 40; 65pp; English.

XX
 CC AAX60005-41 represent antisense oligonucleotides directed against nucleic
 CC acid encoding a human serine/threonine protein phosphatase (PP). The
 CC oligonucleotides are able to inhibit expression of PP, which is involved
 CC in intracellular signalling, cell proliferation, gene expression and
 CC mitosis. The oligonucleotides are used to inhibit expression of PP.
 CC particularly where this is abnormal. They are especially used to treat
 CC hyperproliferation of cells (particularly cancer and smooth muscle cell
 CC proliferation in blood vessels, i.e. restenosis). The oligonucleotide may
 CC also be used to diagnose these conditions; as research reagents (e.g. for
 CC assays or purification) and make it possible to differentiate between PP
 CC isoforms (to assist in deciding a suitable therapeutic regimen)

XX
 SQ Sequence 20 BP; 3 A; 8 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 246 TGAGGAGATGACCAAGTAC 264
 ||||| ||||| |||||

Db 19 TGAGGTGAAGGCCCAAGTAC 1

RESULT 691
 AAZ31452/c
 ID AAZ31452 standard; DNA; 20 BP.

XX
 AC AAZ31452;

XX
 DT 07-FEB-2000 (first entry)

XX
 DE Human neuropilin mRNA specific antisense oligo GTI3623.

XX
 KW Neuropilin; human; growth; metastasis; tumor; neovascularisation; cancer;
 KW papilloma; diabetic retinopathy; antisense; ss.

XX
 OS Synthetic.

OS Homo sapiens.

XX
 PN WO9955855-A2.

XX
 PD 04-NOV-1999.

XX
 PF 23-APR-1999; 99WO-CA000324.

XX
 PR 23-APR-1998; 98US-0082791P.

XX
 PA (GENE-) GENESENSE TECHNOLOGIES INC.

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XX Wright JA, Young AH, Lee YS;
PI WPI; 2000-023357/02.
DR
XX Antisense oligonucleotides that inhibit neuropilin expression, useful for
PT treating cancer.
PT
XX Claim 4; Page 17; 57pp; English.
PS
XX Sequences AA231431-460 represent antisense oligonucleotides which inhibit
CC human neuropilin expression. The antisense oligonucleotides can be used
CC to inhibit the growth or metastasis of a mammalian tumor and inhibit
CC neovascularisation. The oligonucleotides may be used to treat various
CC forms of cancers or tumors, such as sarcomas, melanomas, adenomas,
CC carcinomas of solid tissue, hypoxic tumors, squamous cell carcinomas of
CC the mouth, throat, larynx and lung, genitourinary cancers such as
CC cervical and bladder cancer, hematopoietic cancers, colon cancer, breast
CC cancer, pancreatic cancer, renal cancer, brain cancer, skin cancer, liver
CC cancer, head and neck cancers, and nervous system cancers, as well as
CC benign lesions such as papillomas. The methods may be used to treat
CC neovascularisation disorders such as diabetic retinopathy, and
CC retinopathy of prematurity and age related macular degeneration
XX
SQ Sequence 20 BP; 3 A; 2 C; 8 G; 7 T; 0 U; 0 Other;
Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1560 CCCCAACCCCTCAGATTTT 1578
Db 19 CACCAACCCACAGATTT 1
RESULT 692
AAA5826/c
ID AAA5826 standard; DNA; 20 BP.
XX
AC AAA5826;
DT
DT 01-SEP-2000 (first entry)
XX
XX Human thymidylate synthase antisense oligonucleotide SEQ ID NO:71.
DE
XX Human; DNA methyltransferase; DNA Methylase; antisense oligonucleotide;
XX modulation; inhibition; gene expression; combination therapy; p16;
KW histone deacetylase; HDAC; thymidylate synthase; tumour suppressor;
KW methylation; gene therapy; tumour; cytostatic; antiasthmatic;
KW antiinflammatory; inflammation; asthma; ss.
XX
OS Homo sapiens.
XX
XX WO200023112-A1.
FN
XX 27-APR-2000.
PD
XX 19-OCT-1999; 99WO-US024278.
PF
XX 19-OCT-1998; 98US-0104804P.
PR
XX (METH-) METHYLGENE INC.
PA
XX Besterman JM, Macleod AR, Siders WM;
PI
XX WPI; 2000-339532/29.
DR
XX Inhibiting gene expression e.g. DNA methyltransferase, by treating cells
PT with a synergistic amount of antisense oligonucleotide and protein
PT effectors e.g. 5-aza-cytidine of gene products, useful for gene therapy
PT of e.g. tumors.
XX
XX Example 8; Page 31; 99pp; English.
PS

```

The present invention describes a method for inhibiting the expression of a gene in a cell comprising contacting the cell with an effective synergistic amount of an antisense oligonucleotide which inhibits expression of the gene, and an effective synergistic amount of a protein effector of a product of the gene. Also described are: (1) a method for treating a disease responsive to inhibition of a gene in a mammal; (2) a method for inhibiting tumour growth in mammal; (3) an inhibitor of a gene comprising an antisense oligonucleotide which inhibits expression of the gene in operable association with a protein effector of a gene product; and (4) a pharmaceutical composition comprising the inhibitor of (3). The methods and compositions are useful as analytical tools for transgenic studies and as therapeutic tools, e.g. as gene therapy tools for human diseases including benign and malignant tumours, inflammation or asthma. The methods, inhibitors and compositions of the invention that inhibit expression or activity of a gene or gene product may be used to treat patients having, or predisposed to developing, a disease responsive to inhibition of the gene. These may also be used to activate silenced genes to provide missing gene functions and improve a given condition. Furthermore, the methods and compositions are useful as probes of the physiological function of a gene product in an experimental cell culture or animal system; and to evaluate the effect of inhibiting gene activity or expression. AAA55758 to AAA5842 represent oligonucleotide sequences which are used in the exemplification of the present invention

Sequence 20 BP; 5 A; 6 C; 2 G; 7 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 238 GCAATGCTGAGGAGATGA 256
Db 20 GACATGCTGAGGTTAIGA 2

RESULT 693
AAZ36403/C
ID AAZ36403 standard; DNA; 20 BP.
XX
AC AAZ36403;
XX
DT 22-FEB-2000 (first entry)
XX
DE Probe HG01.85R specific for G-protein coupled receptor HG01 cDNA.
XX
KW Human; G-protein coupled receptor; HG01;
KW endothelin receptor pathological state; gene therapy; probe; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9960153-A2.
XX
PD 25-NOV-1999.
XX
PF 17-MAY-1999; 99WO-US010808.
XX
PR 21-MAY-1998; 98US-0086294P.
XX
PA (MERI) MERCK & CO INC.
XX
PI Liu Q;
XX
DR WPI; 2000-053303/04.
XX
PT Novel receptor protein, useful for identifying antagonists and agonists
PT for drug development.
XX
PS Example 1; Page 18; 33pp; English.
XX
CC Probes AAZ36396-236403 and AAZ36406-07 were used to isolate cDNA encoding
CC a G-protein coupled receptor, designated HG01. HG01 is highly expressed

CC in the brain, and is thought to be related to the endothelin receptors.
 CC The HG01 cDNA sequence was isolated from a human foetal brain library.
 CC HG01 can be used to identify binding substances, antagonists and
 CC agonists, which may be useful pharmacologically to modulate HG01
 CC activity. G-protein coupled receptors (GPCRs) are involved in many
 CC pathological states, and modulators of GPCR activity are therefore useful
 CC to treat such conditions. HG01 (or fragments) are also useful to produce
 CC antibodies. The polynucleotides can be used in gene therapy, especially
 CC to treat conditions requiring increased HG01
 CC
 CC Sequence 20 BP; 9 A; 8 C; 2 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 457 GCTGTGAATTGGCTGGGG 475
 Db 19 GCTGTGAATTGGCTGGG 1

RESULT 694

AA11848
 ID AA11848 standard; DNA; 20 BP.

AC AA11848;

DT 16-AUG-2000 (first entry)

DE Human MDMX antisense oligonucleotide #31171.

OS MDMX; human; antisense; inhibitor; anticarcinogen; antiinflammatory;
 antiinfectious; modulation; treatment; disease; diagnosis; primer; ss.

OS Homo sapiens.

XX US6046320-A.

XX 04-APR-2000.

XX 09-APR-1999; 99US-00289267.

XX 09-APR-1999; 99US-00289267.

XX (ISIS-) ISIS PHARM INC.

XX Monia BP, Cowsert LM;

XX WPI; 2000-282710/24.

XX New antisense oligonucleotides targeting nucleic acids encoding human
 PT MDMX useful for inhibiting MDMX expression and for treating diseases
 PT associated with MDMX expression e.g. tumor formation, inflammation.

XX Example 15; Col 69-70; 51pp; English.

XX This invention describes a novel antisense compound (I), 8-30 nucleobases
 CC in length, targeted to a nucleic acid encoding a human MDMX. (I)
 CC specifically hybridizes with and inhibits the expression of human MDMX.
 CC The products of the invention have anticarcinogen, antiinflammatory and
 CC antitumorous activity. Synthesized chimeric oligonucleotides targeted
 CC to human MDMX, 20 nucleotides in length, composed of a central gap region
 CC consisting of ten 2'-deoxynucleotides flanked on both sides by 5-
 CC nucleotide wings were tested for antisense inhibition of MDMX expression.
 CC Results of real-time quantitative polymerase chain reaction (PCR) showed
 CC 71 out of the 159, 20 base pair sequences, all fully defined in the
 CC specification, demonstrated at least 30% inhibition of MDMX expression.
 CC The antisense oligonucleotides are useful for effective and specific
 CC modulation, particularly inhibition of MDMX expression, and may be used
 CC in treating humans or animals suspected of having or being prone to a
 CC disease or condition associated with expression of MDMX. The antisense
 CC oligonucleotides may also be used as research reagents or kits, and as
 CC diagnostics, e.g. to elucidate the function of a particular gene or to

CC distinguish between functions of various members of a biological pathway,
 CC and as prophylaxis, e.g. to prevent or delay infection, inflammation or
 CC tumor formation. AAA11781-All945 represent antisense oligonucleotides
 CC described in the method of the invention

XX Sequence 20 BP; 3 A; 5 C; 3 G; 9 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 20;

Best Local Similarity 84.2%; Pred. No. 8.7e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2016 GTTGCTAGTCTAGTTTCCT 2034

Db 1 GTTGCTTCTCAAGTTTCCT 19

RESULT 695

AA29827/C

ID AA29827 standard; DNA; 20 BP.

XX AA29827;

DT 25-AUG-2000 (first entry)

XX Human jun N-terminal kinase kinase-2 antisense oligonucleotide #12.

XX Human; jun N-terminal kinase kinase-2; JKK-2; modulation; tumour;
 antiinflammatory; cytostatic; antiinfectious; infection; inflammation;
 detection; antisense therapy; phosphorothioate; ss.

OS Homo sapiens.

XX Key Location/Qualifiers

FT modified_base 1..20

FT /*tag= a
 /note= "Phosphorothioate linkages"

XX US6054440-A.

XX 25-APR-2000.

XX 24-JUN-1999; 99US-00344001.

XX 24-JUN-1999; 99US-00344001.

XX (ISIS-) ISIS PHARM INC.

XX Monia BP, Cowsert LM;

XX WPI; 2000-339506/29.

XX Antisense compound specifically hybridizing and inhibiting the expression
 PT of human Jun N-terminal kinase kinase-2 is useful for treating infection,
 PT inflammation and tumor.

XX Claim 3; Col 40; 31pp; English.

XX The present invention describes an antisense compound (I) of 8-30
 CC nucleobases, specifically hybridizing to, and inhibiting expression of,
 CC human jun N-terminal kinase kinase-2 (JKK-2). Also described is a method
 CC of inhibiting the expression of human JKK-2 in human cells or tissues,
 CC comprising contacting the cells or tissues, with (I), in vitro. (I) has
 CC antiinflammatory, cytostatic and antiinfectious activities. (I) is useful
 CC for inhibiting the expression of JKK-2 in human cells or tissues and
 CC prevents or delays infection, inflammation or tumor formation associated
 CC with altered expression of JKK-2. (I) is also useful for detecting the
 CC levels of JKK-2 in a sample. The present sequence represents a
 CC phosphorothioate antisense oligonucleotide for human JKK-2, from the
 CC present invention

XX Sequence 20 BP; 2 A; 12 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 20;

Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 601 GGTGAGCGCGTGAAGAGG 619
Db ||||| ||||| ||||| ||||| |||||
19 GGTGCGCGCGGGAAGATG 1

RESULT 696
AAA29829/c
ID AAA29829 standard; DNA; 20 BP.
XX
AC AAA29829;
XX
DT 25-AUG-2000 (first entry)
DE Human jun N-terminal kinase kinase-2 antisense oligonucleotide #14.
XX
XX Human; jun N-terminal kinase kinase-2; JKK-2; modulation; tumour;
KW antiinflammatory; cytostatic; antiinfectious; inflammation;
KW detection; antisense therapy; phosphorothioate; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /*note= "Phosphorothioate linkages"
XX
PN US054440-A.
XX
PD 25-APR-2000.
XX
PF 24-JUN-1999; 99US-00344001.
XX
PR 24-JUN-1999; 99US-00344001.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Monia BP, Cowseert LM;
XX
WPI; 2000-338506/29.
XX
XX Antisense compound specifically hybridizing and inhibiting the expression
PT of human Jun N-terminal kinase kinase-2 is useful for treating infection,
PT inflammation and tumor.
XX
PS Claim 3; Col 40; 3lpp; English.

XX The present invention describes an antisense compound (I) of 8-30
CC nucleobases, specifically hybridizing to, and inhibiting expression of,
CC human jun N-terminal kinase kinase-2 (JKK-2). Also described is a method
CC of inhibiting the expression of human JKK-2 in human cells or tissues,
CC comprising contacting the cells or tissues, with (I), in vitro. (I) has
CC antiinflammatory, cytostatic and antiinfectious activities. (I) is useful
CC for inhibiting the expression of JKK-2 in human cells or tissues and
CC prevents or delays infection, inflammation or tumour formation associated
CC with altered expression of JKK-2. (I) is also useful for detecting the
CC levels of JKK-2 in a sample. The present sequence represents a
CC phosphorothioate antisense oligonucleotide for human JKK-2, from the
XX present invention
XX
SQ Sequence 20 BP; 1 A; 13 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 51 GGAGCGGAGCAGATGGCG 69
Db ||||| ||||| ||||| ||||| |||||
20 GGCGCGCGGGAAGATGGCG 2

RESULT 697
AAA57979/c
ID AAA57979 standard; DNA; 20 BP.
XX
AC AAA57979;
XX
DT 10-OCT-2000 (first entry)
DE Candida albicans Tca2 retrotransposon insertion site, contig4-2824.
XX
XX Retrotransposon; pCal; Tca2; Tyl; copia; long terminal repeat; LTR;
KW gag gene; group antigen; polyprotein; pol; aspartate protease; integrase;
KW reverse transcriptase; RNaseH; pseudoknot; readthrough translation;
KW stop codon suppression; gene delivery; gene therapy vector;
KW genetic vaccine composition; immunogenic; transgenic animal;
KW genomic insertion site; ds.
XX
OS Candida albicans.
XX
PN WO200026397-A1.
XX
PD 11-MAY-2000.
XX
PF 01-NOV-1999; 99WO-NZ000179.
XX
PR 30-OCT-1998; 98CA-02249046.
PR 30-OCT-1998; 98US-0106342P.
XX
PA (JANC) JANSSEN PHARM NV.
XX
PI Luyten WHML, De Backer MD, Nelissen BJM, Poulter RTW;
XX
WPI; 2000-365640/31.
XX
XX Novel retrotransposon expression vectors useful for expressing an
PT antigen, epitope or therapeutic agent, or detecting genes or the presence
PT of Candida in a sample.
XX
PS Example 19; Fig 69; 204pp; English.

XX The invention relates to novel retrotransposons from the yeast Candida
CC albicans which have a copy number of 40-150, preferably 50-100 copies per
CC genome. In particular, the invention relates to the novel C. albicans
CC Tyl/copia retrotransposon pCal (AAA57920), and to the integrated form of
CC this retrotransposon, designated tca2, and to the novel C. albicans
CC retrotransposons 1-28. pCal was initially isolated from C. albicans
CC HOG1042 and has a copy number of 50-100 copies per cell. It comprises
CC identical 280 bp long terminal repeats (LTRs) and two open reading frames
CC (ORFs). The first ORF encodes a gag (group antigen) protein, and the
CC second ORF encodes a polyprotein (pol) consisting of an aspartate
CC protease, integrase, reverse transcriptase (RT) and RNaseH. The gag and
CC pol ORFs of pCal are in the same reading frame, separated only by a
CC termination codon (TGA). Translation of the pol ORF occurs through the
CC occasional readthrough suppression of the stop codon, which is mediated
CC by the formation of a pseudoknot within the gag-pol mRNA. The
CC retrotransposons of the invention can be used as vectors for in vitro or
CC in vivo transformation and expression. They can thus be used for the
CC delivery and expression of a therapeutic, immunological or immunogenic
CC molecule (e.g., an antigen) and may also be used for eliciting an
CC immunological response in a host organism. They are therefore useful in
CC genetic vaccine compositions and for gene therapy, particularly where the
CC use of retroviral vectors is unsafe or undesirable. Additionally, the
CC retrotransposons may be used to generate transgenic animals, to detect
CC the presence of Candida in a sample, to detect and disrupt genes, and to
CC assign functions to nucleotide sequences. Sequences AAA57968-AS7981
CC represent motifs within the C. albicans genome into which a Tca2
XX retrotransposon was able to insert
XX
SQ Sequence 20 BP; 12 A; 1 C; 0 G; 7 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1601 TTTATATAAAATTTATTA 1619
 ||||| | ||||| ||
 Db 20 TTTATATTATAATTAGTA 2

RESULT 698
 AAC81236/C
 ID AAC81236 standard; DNA; 20 BP.
 XX
 AC AAC81236;
 XX
 XX 23-FEB-2001 (first entry)
 DT
 XX
 DE Human tyrosine phosphatase HD-PTP exon 4-5 PCR primer, SEQ ID NO:14.
 XX
 KW Human; histidine domain-protein tyrosine phosphatase; HD-PTP;
 KW chromosome 3p21.3; gene deletion; tumour suppressor; cytostatic;
 KW lung cancer; tumour; gene therapy; diagnosis; recombinant production;
 KW anticancer; PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200063392-A1.
 XX
 PD 26-OCT-2000.
 XX
 PF 14-APR-2000; 2000WO-JP002455.
 XX
 XX 16-APR-1999; 99JP-00108842.
 PR
 XX (KYOW) KYOWA HAKKO KOGYO KK.
 PA
 XX Shimizu K;
 PI
 XX WPI; 2000-672740/65.
 DR
 XX Human tyrosine phosphatase with oncostatic activity encoded by a gene
 PT frequently deleted in lung cancer, useful for treatment and diagnosis of
 PT tumors.

PS Example 3; Page 120; 134pp; Japanese.
 XX
 XX The invention relates to a novel human tyrosine phosphatase, histidine
 CC domain-protein tyrosine phosphatase (HD-PTP; AAB29661) and to human HD-
 CC PTP nucleic acids (AAC81224, AAC81225, AAC81262, AAC81263). The HD-PTP
 CC gene is located on chromosome 3p21.3. This region is frequently found to
 CC be deleted in lung cancers, and is therefore thought to contain a tumour
 CC suppressor gene. The invention also relates to expression vectors and
 CC host cells containing human HD-PTP nucleic acids; the recombinant
 CC production of HD-PTP; anticancer drugs containing HD-PTP; gene therapy
 CC compositions containing DNA encoding HD-PTP; diagnostic reagents
 CC containing HD-PTP oligonucleotides; antibodies specific for HD-PTP; and
 CC an immunoassay method using HD-PTP-specific antibodies for use in cancer
 CC diagnosis and investigation. HD-PTP proteins, nucleic acids and
 CC antibodies may be used in the treatment, investigation and diagnosis of
 CC cancers, particularly those of the lung. The present sequence represents
 CC a human HD-PTP PCR primer used in an exemplification of the invention
 XX
 SQ Sequence 20 BP; 3 A; 11 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1664 GGCAGCTGTGCTGGGTGAG 1682
 ||||| | ||||| ||
 Db 20 GGCAGCACTGTGCTGGGTGAG 2

RESULT 699
 AAA66160
 ID AAA66160 standard; DNA; 20 BP.

XX AAA66160;
 AC
 XX 09-OCT-2000 (first entry)
 DT
 XX
 DE Dog genomic marker oligonucleotide sequence SEQ ID NO:22.
 XX
 KW Dog; genome; genomic marker; radiation hybrid map; identification;
 KW chromosome location; gene marker; polymorphic microsatellite marker;
 KW phenotype; behaviour; pedigree; ss.
 XX
 OS Canis familiaris.
 XX
 PN WO200029615-A2.
 XX
 PD 25-MAY-2000.
 XX
 PF 15-NOV-1999; 99WO-IB001907.
 XX
 XX 13-NOV-1998; 98US-0108193P.
 PR
 XX (CNRS) CNRS CENT NAT RECH SCI.
 PA
 XX Galibert F, Andre C;
 PI
 XX WPI; 2000-387821/33.
 DR
 XX New radiation hybrid map of the dog, Canine familiaris, genome, useful
 PT for e.g. identifying genes implicated in phenotypic and behavioral traits
 PT or in genetic diseases and for studying dog pedigrees.
 XX
 PS Claim 1; Page 54; 87pp; English.
 XX
 CC The present invention describes a radiation hybrid map of the dog (Canine
 CC familiaris) genome comprising the genome location of a marker selected
 CC from AAA66139 to AAA66942. The radiation hybrid map is useful for
 CC identifying and localising dog genes, since it covers approximately 80 %
 CC of the dog genome and provides a dense map integrating different types
 CC (i.e. Type I and Type II) of markers. The map and the dog genome markers
 CC (or complementary sequences) are especially useful to identify genes
 CC responsible for phenotypic and behavioural traits in dogs, to identify
 CC morbid genes, to analyse diseases and identify implicated genes in such
 CC diseases and their alleles, and to study dog pedigrees. They may also be
 CC useful for isolating corresponding human gene sequences e.g. genes
 CC involved in genetic diseases
 XX
 SQ Sequence 20 BP; 1 A; 2 C; 11 G; 6 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1740 GGGTGGCCAGGCTGGGTGA 1758
 ||||| | ||||| ||
 Db 1 GGGTGGCTGGGCTGGGTGA 19

RESULT 700
 AAC62432/C
 ID AAC62432 standard; DNA; 20 BP.
 XX
 AC AAC62432;
 XX
 DT 07-FEB-2001 (first entry)
 XX
 DE Serine/threonine protein phosphatase 5 (PP5) antisense sequence #6.
 XX
 KW Human; serine/threonine protein phosphatase 5; PP5; inflammation;
 KW glucocorticoid receptor agonist; hyperproliferative disorder;
 KW immune system; connective tissue condition; cancer;
 KW antisense oligonucleotide; ss.
 XX
 OS Homo sapiens.


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XX WO200058523-A1.
PN
XX
XX 05-OCT-2000.
PD
XX
XX 31-MAR-2000; 2000WO-US008774.
PF
XX
XX 31-MAR-1999; 99US-00282736.
PR
XX
XX (SALA-) SOUTH ALABAMA MEDICAL SCI FOUND.
PA
XX
XX Honkanen RE;
PI
XX
XX WPI; 2000-656172/63.
XX
XX Composition comprising glucocorticoid receptor agonist and compound which
PT decreases levels of human serine/threonine protein phosphatase 5 (PP5)
PT protein, useful for enhancing glucocorticoid therapy.
PT
XX
XX Example 2; Page 61; 79pp; English.
PS
XX
XX The present invention is concerned with compositions comprising a
CC glucocorticoid receptor agonist and a compound which reduces the levels
CC of active human serine/threonine protein phosphatase 5 (PP5) in cells.
CC This latter compound may be an antisense oligonucleotide such as the one
CC shown here. The compounds of the invention are useful in the treatment of
CC hyperproliferative conditions such as cancer, stenosis and restenosis,
CC inflammatory immune system conditions such as rheumatoid arthritis,
CC inflammatory bowel disease, asthma and glomerulonephritis and connective
CC tissue diseases such as systemic lupus erythematosus
XX
XX Sequence 20 BP; 3 A; 8 C; 3 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 246 TGAGGAGATGACCAAGTAC 264
DB 19 TGAGGTGAAGGCCAAGTAC 1
RESULT 701
AAA80569
ID AAA80569 standard; DNA; 20 BP.
XX
XX AAA80569;
AC
XX
XX 22-NOV-2000 (first entry)
DT
XX
XX Human ASTHII gene exon a 5' boundary region.
DE
XX
XX ASTHII locus; ASTHII; human; chromosome 11p; asthma;
KW bronchial hyperreactivity; ets family; transcription factor;
KW splice variant; genetic predisposition; polymorphism; antibody;
KW drug screening; prophylaxis; therapy; diagnosis; exon boundary; ss.
XX
XX Homo sapiens.
OS
XX
XX US6087485-A.
PN
XX
XX 11-JUL-2000.
PD
XX
XX 21-JAN-1998; 98US-00009913.
PF
XX
XX 21-JAN-1997; 97US-0035663P.
PR
XX
XX 01-JUL-1997; 97US-0051432P.
XX
XX (AXYS-) AXYS PHARM INC.
PA
XX
XX Galvin M, Miller A, North M, Cardon L, Buckler A;
PI Brooks-Wilson AR, Carey AH;
XX

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DR WPI; 2000-505109/45.
XX
XX New nucleic acids other than naturally occurring chromosomes encoding
PT ASTHII protein, for e.g. screening compositions that modulate expression
PT or function of ASTHII proteins or as diagnostics for genetic
PT predisposition to asthma.
XX
XX Example; Col 38; 131pp; English.
PS
XX
XX The invention relates to the ASTHII locus on the short arm of human
CC chromosome (11p). This locus comprises the ASTHII and ASTHIIJ genes, which
CC are associated with a genetic predisposition to asthma and bronchial
CC hyperreactivity. The ASTHII and ASTHIIJ genes are oriented in opposite
CC directions with the ASTHII locus, and have similar patterns of expression
CC and common sequence motifs. They are both expressed in trachea, lung and
CC several other tissues. ASTHII and ASTHIIJ are novel members of the ets
CC family of transcription factors, which have been implicated in the
CC activation of a variety of genes including the TCRA gene and cytokine
CC genes known to be important in the aetiology of asthma. Both ASTHII and
CC ASTHIIJ mRNAs are alternatively spliced. Alternative splicing of
CC transcripts has no effect on the open reading frame of ASTHIIJ, as the
CC exons involved are all 5' to the start codon in exon b. In contrast,
CC alternative splicing of ASTHII transcripts results in 3 different ASTHII
CC isoforms. The invention also encompasses mouse asthII protein. The ASTHII
CC nucleic acids are useful as diagnostics to identify a hereditary
CC predisposition to asthma, as probes for identifying ASTHII related genes,
CC for identifying expression of the gene in a biological specimen, and for
CC generating genetically modified non-human animals or site specific gene
CC modifications in cell lines. The encoded ASTHII proteins are useful as
CC immunogens to raise specific antibodies; in drug screening for
CC compositions that mimic or modulate activity or expression of ASTHII
CC and/or ASTHIIJ (including altered forms of these proteins); and as a
CC therapeutic. The ASTHII genes or fragments thereof, encoded proteins,
CC ASTHII genomic regulatory regions, and anti-ASTHII and anti-ASTHIIJ
CC antibodies are useful in the identification of individuals predisposed to
CC development of asthma, and for modulation of gene activity in vivo for
CC prophylactic and therapeutic purposes. The intact ASTHII or ASTHIIJ
CC proteins or active fragments thereof may be used to modulate or reduce
CC bronchial hyperreactivity. Sequences AAA80550-AA80570 represent the exon
CC boundary regions of the human ASTHII gene
XX
XX Sequence 20 BP; 5 A; 4 C; 2 G; 9 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 2033 CTTTTTGAGATACTATTTT 2051
DB 2 CTTTTCAGATACTACTAT 20
RESULT 702
AAA63829
ID AAA63829 standard; DNA; 20 BP.
XX
XX AAA63829;
AC
XX
XX 04-DEC-2000 (first entry)
DT
XX
XX Primer DAGKIAArev used to amplify human DAGKbeta cDNA fragments.
DE
XX
XX Human; diacylglycerol kinase beta; DAGKbeta; diacylglycerol; DAG;
KW phosphatidic acid; DAG-dependent protein kinase C activation;
KW mood disorder; epilepsy; neurodegenerative disorder; anxiety;
KW schizophrenia; migraine; drug dependence; stroke; Alzheimer's dementia;
KW Parkinson's disease; PCR primer; ss.
XX
XX Homo sapiens.
OS
XX
XX WO200047723-A2.
PN
XX
XX 17-AUG-2000.
PD

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XX 23-DEC-1999; 99WO-GB004421.
 XX 15-FEB-1999; 99GB-00003430.
 XX (GLAX) GLAXO GROUP LTD.
 XX Caricasole A, Caldara F, Sala CF;
 XX WPI; 2000-506093/45.
 XX New human diacylglycerol kinase beta (hDAGKbeta) protein and its
 PT modulating compounds, useful for treatment of neurodegenerative and mood
 PT disorders.
 XX Disclosure; Page 11; 57pp; English.
 XX PCR primers AAA3828-29 were used to amplify a cDNA fragment encoding
 CC human diacylglycerol kinase beta (DAGKbeta) variants from a foetal cDNA
 CC library. DAGK converts diacylglycerol (DAG) to phosphatidic acid and
 CC attenuates DAG-dependent protein kinase C activation. Compounds that
 CC modulate the activity of DAGKbeta may be administered to a human patient
 CC for the treatment or prophylaxis of a disorder that is responsive to
 CC modulation of DAGK activity. The disorder may be a mood disorder,
 CC epilepsy, a neurodegenerative disorder, anxiety, schizophrenia, migraine,
 CC drug dependence, stroke, Alzheimer's dementia or Parkinson's disease
 XX Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;
 SQ

Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 645 GACTGTGTCCTTCATAAG 663
 Db 1 GACTGTGACTTCAGAG 19

RESULT 703
 AAA27818/c
 ID AAA27818 standard; DNA; 20 BP.
 XX AAA27818;
 AC
 XX 06-AUG-2003 (revised)
 DT 12-SEP-2000 (first entry)
 XX North American PRRS virus ORF1a PCR primer.
 DE North American PRRS virus; Nidovirales virus; pig; swine; vaccine;
 XX PCR primer; ss.
 KW Porcine reproductive and respiratory syndrome virus.
 OS
 XX EPI018557-A2.
 FN 12-JUL-2000.
 XX 25-NOV-1999; 99EP-00309409.
 PF 22-DEC-1998; 98US-0113345P.
 XX (PFIZ) PFIZER PROD INC.
 XX Calvert JG, Welch SW, Sheppard MG;
 PI WPI; 2000-444364/39.
 XX New polynucleotide encoding an infectious RNA molecule of a North
 PT American porcine reproductive and respiratory syndrome virus for use as a
 PT vaccine in protecting swine and other animals from infection by a
 PT pathogen.
 XX

PS Example 1; Page 17; 53pp; English.
 XX The present sequence is that of a PCR primer corresponding to nucleotides
 CC 1361-1380 in the ORF1a gene of North American porcine reproductive and
 CC respiratory syndrome (PRRS) virus P129A. It was used with the primer
 CC given in AAA27819 in the PCR amplification of a 8078 nucleotide RT-PCR
 CC product spanning the large gap between ORF1a and ORF1b of the P129A
 CC genome (see AAA27809). The invention relates to polynucleotide molecules,
 CC plasmids, viral vectors and transfected host cells that comprise this DNA
 CC sequence. It also relates to polynucleotide molecules, viral vectors and
 CC transfected host cells encoding a genetically modified North American
 CC PRRS virus that is disabled in its ability to cause PRRS, or which
 CC encodes 1 or more heterologous antigenic epitopes, for use as a vaccine.
 CC (Updated on 06-AUG-2003 to correct OS field.)
 XX Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;
 SQ

Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 557 AGTATCACCAGAGCGTGCT 575
 Db 19 AGTTGCACCAGAGCGTGCT 1

RESULT 704
 AAC79574/c
 ID AAC79574 standard; DNA; 20 BP.
 XX AAC79574;
 AC
 XX 07-FEB-2001 (first entry)
 DT Human p38beta antisense oligonucleotide SEQ ID 99.
 DE Antisense oligonucleotide; p38 mitogen activated protein kinase; MAPK;
 XX anti-rheumatic; antiarthritic; immunosuppressive; cardiac; heart disease;
 KW anti-inflammatory; autoimmune disease; rheumatoid arthritis; apoptosis;
 KW phosphorothioate; ss.
 XX Homo sapiens.
 OS WO2000059919-A1.
 FN 12-OCT-2000.
 XX 04-APR-2000; 2000WO-US0008794.
 PF 06-APR-1999; 99US-00286904.
 XX (ISIS-) ISIS PHARM INC.
 XX Monia BP, Gaarde WA, Nero PS, McKay R, Popoff I;
 PI WPI; 2000-664982/64.
 DR Antisense compound targeted to p38 mitogen activated protein kinase
 XX inhibits protein kinase and is useful for diagnosing and treating
 PT inflammatory, autoimmune and heart disease.
 XX Claim 19; Page 63; 90pp; English.
 XX This invention relates to antisense compounds 8-30 nucleobases in length
 CC targeted to the 5'-untranslated region, translational start site,
 CC translational termination region or 3'-untranslated region of a nucleic
 CC acid encoding a p38 mitogen activated protein kinase (MAPK), where the
 CC antisense oligonucleotides inhibit the expression of MAPK. Sequences
 CC AAC79480 and AAC79501 represent human p38alpha MAPK and p38beta MAPK cDNA
 CC sequences. AAC79481 - AAC79500 and AAC79553 - AAC79570 represent human
 CC p38alpha antisense oligonucleotides, while AAC79502 - AAC79521 and
 CC AAC79571 - AAC79580 represent human p38beta antisense oligonucleotides.
 CC Also included in the invention are a p38alpha cDNA sequence AAC79523 and

CC antisense oligonucleotides AAC79523 - AAC79536 isolated from rat tissue.
 CC Murine p38beta MAPK cDNA is represented in AAC79537 and antisense
 CC oligonucleotides targeting the sequence are given in AAC79538 - AAC79552.
 CC The antisense oligonucleotides have antirheumatic; antiarthritic;
 CC immunosuppressive; cardiant and antiinflammatory activity. The antisense
 CC oligonucleotides are useful for inhibiting the expression of p38 MAPK in
 CC cells or tissues. The oligonucleotides are used for treating an animal
 CC with diseases such as inflammatory or autoimmune diseases e.g. rheumatoid
 CC arthritis, or heart disease. The oligonucleotides are also useful for
 CC inhibiting inflammation or apoptosis
 XX
 SQ Sequence 20 BP; 4 A; 4 C; 9 G; 3 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 784 TTCAAGCCGGTCATGTCCA 802
 |||| |||| |||| ||||
 Db 20 TTCACGCCGCCACGTCCA 2
 RESULT 705
 AAF32981/c
 ID AAF32981 standard; DNA; 20 BP.
 XX
 AC AAF32981;
 XX
 DT 23-MAR-2001 (first entry)
 XX
 DE Human B7-2 antisense oligonucleotide SEQ ID NO: 178.
 XX
 KW Human; mouse; B7-1; B7-2; antisense; PCR primer; inflammation;
 KW autoimmune disorder; phosphorothioate backbone; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200074687-A1.
 XX
 PD 14-DEC-2000.
 XX
 PF 25-MAY-2000; 2000WO-US014471.
 XX
 PR 04-JUN-1999; 99US-00326186.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Bennett CF, Vickers TA, Karras JG;
 XX
 DR WPI; 2001-049991/06.
 XX
 PT Novel compound for diagnosing, preventing and treating immune disorders,
 PT comprising an oligonucleotide that specifically hybridizes with a nucleic
 PT acid sequence encoding B7 protein.
 XX
 PS Example 14; Page 83; 162pp; English.
 XX
 CC The present invention provides sequences of antisense oligonucleotides
 CC targeted at the murine and human B7-1 and B7-2 coding and mRNA sequences.
 CC The antisense sequences have phosphorothioate backbones and some
 CC nucleotides are 2'-methoxyethoxy residues. The sequences can be used in
 CC the treatment of inflammatory and autoimmune disorders, including asthma,
 CC juvenile diabetes mellitus, myasthenia gravis, Graves' disease,
 CC rheumatoid arthritis, allograft rejection, inflammatory bowel disease,
 CC multiple sclerosis, psoriasis, systemic lupus erythematosus, contact
 CC dermatitis, rhinitis, allergies and cancer
 XX
 SQ Sequence 20 BP; 7 A; 5 C; 7 G; 1 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1713 TTCCCGTTCTTAACTTTGA 1731
 |||| |||| |||| ||||
 Db 1 TTCCCGTTCTTACGCTTGA 19
 RESULT 707
 AAF73050/c
 ID AAF73050 standard; DNA; 20 BP.
 XX
 AC AAF73050;
 XX
 DT 24-APR-2001 (first entry)
 XX

QY 1277 TCTCGATCGCTCCTCTGA 1295
 |||| |||| |||| ||||
 Db 19 TCTGGTGTCTCCTCTGA 1
 RESULT 706
 AAF55019
 ID AAF55019 standard; DNA; 20 BP.
 XX
 AC AAF55019;
 XX
 DT 15-MAY-2001 (first entry)
 XX
 DE PCR primer used to amplify exons 1-3 of the GAPDH gene.
 XX
 KW Pulmonary carcinoma cell line; NCI-H460; fluorescent protein;
 KW micrometastasis; pulmonary metastasis; adhesion; cell proliferation;
 KW cancer cell; GAPDH gene; PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200105946-A1.
 XX
 PD 25-JAN-2001.
 XX
 PF 11-JUL-2000; 2000WO-FR001997.
 XX
 PR 15-JUL-1999; 99FR-00009164.
 XX
 PA (INRM) INSERM INST NAT SANTE & RECH MEDICALE.
 XX
 PI Diarra-Mehrpour M, Paris S;
 XX
 DR WPI; 2001-159527/16.
 XX
 PT Model for metastasis of human pulmonary carcinoma, useful e.g. for drug
 PT screening, comprises animal injected with highly metastatic cells that
 PT express fluorescent protein.
 XX
 PS Example; Page 18; 64pp; French.
 XX
 CC The specification describes a human pulmonary carcinoma cell line which
 CC is derived from NCI-H460. The cell line constitutively expresses a
 CC fluorescent protein stably, produces spontaneous, fluorescent pulmonary
 CC metastases after injection into an animal without orthotopic
 CC transplantation, and expresses the fluorescent protein to allow detection
 CC of a single micrometastasis. The cell line is used to screen for agents
 CC for treatment of pulmonary metastases and to create a model for studying
 CC development and progression of pulmonary metastases, e.g. the involvement
 CC of proteases and their inhibitors in adhesion, invasiveness and
 CC proliferation of cancer cells. PCR primers AAF55018-19 were used to
 CC amplify a fragment of the H2 gene, during analysis of cell lines of the
 CC invention
 XX
 SQ Sequence 20 BP; 2 A; 8 C; 3 G; 7 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1713 TTCCCGTTCTTAACTTTGA 1731
 |||| |||| |||| ||||
 Db 1 TTCCCGTTCTTACGCTTGA 19
 RESULT 707
 AAF73050/c
 ID AAF73050 standard; DNA; 20 BP.
 XX
 AC AAF73050;
 XX
 DT 24-APR-2001 (first entry)
 XX

DE Human daxx inhibitory antisense phosphorothioate oligonucleotide SEQ:151.
 XX Antisense oligonucleotide; daxx; inhibition; phosphorothioate;
 KW Fas binding protein; CNP-C binding protein; dap6; EAP; cytostatic;
 KW antiinflammatory; death associated protein 6; Ets-1 associated protein;
 KW infection; inflammation; tumour formation; ss.
 XX
 OS Homo sapiens.
 XX
 PN US6180353-B1.
 XX
 PD 30-JAN-2001.
 XX
 XX 24-JAN-2000; 2000US-00490692.
 XX
 XX 24-JAN-2000; 2000US-00490692.
 XX
 XX (ISIS-) ISIS PHARM INC.
 XX
 XX Dean NM, Cowser LM;
 XX
 XX WPI; 2001-217744/22.
 XX

XX Novel antisense compounds capable of modulating expression of daxx useful
 PT for diagnosis, prophylaxis and treatment of diseases associated with
 PT expression of daxx.
 XX
 XX Claim 1; Col 49; 59pp; English.
 PS

XX The present invention describes an antisense compound (I) up to 30
 CC nucleobases in length, where (I) inhibits expression of daxx (also known
 CC as Fas binding protein, CNP-C binding protein, dap6 for death associated
 CC protein 6 and EAP for Ets-1 associated protein). (I) has cytostatic and
 CC antiinflammatory activity, and can be used in antisense therapy and as a
 CC modulator of daxx. (I) is useful for inhibiting the expression of daxx in
 CC cells or tissues in vitro. (I) can be utilised for diagnostics,
 CC therapeutics for the treatment of diseases associated with the expression
 CC of daxx, prophylaxis e.g. to prevent or delay infection, inflammation or
 CC tumour formation and as research reagent. The present sequence represents
 CC an inhibitory human daxx antisense phosphorothioate oligonucleotide which
 CC is used in the exemplification of the present invention
 XX

SQ Sequence 20 BP; 4 A; 7 C; 3 G; 6 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1245 CGATGAGCAGACGAC 1263
 DB 20 CGATGATGACGATGAC 2

RESULT 708

AAH25806
 ID AAH25806 standard; DNA; 20 BP.

XX
 AC AAH25806;

XX 20-AUG-2001 (first entry)

XX Murine ibaI DNA PCR primer #1.

DE Human; mouse; immunomodulatory; monocyte; macrophage; inhibitor;
 KW PCR primer; ss.
 KW Mus sp.

XX JP2001078775-A.

XX 27-MAR-2001.

XX 14-SEP-1999; 99JP-00260793.

XX 14-SEP-1999; 99JP-00260793.
 PR (KOKU-) KOKURITSU SEISHIN SHINKEI CENT SOCHO.
 PA (IYAK-) IYAKUHIN FUKUSAYO HIGAI KYUSAI KENKYU SH.
 PA (MOCH) MOCHIDA PHARM CO LTD.
 XX
 XX WPI; 2001-313369/33.
 XX

PT A macrophage function modifier useful for preventing and treating
 PT diseases caused by the increase or decrease in macrophage activity or
 PT function.
 XX

XX Example 1; Page 8; 20pp; Japanese.

XX The present invention provides a number of murine and human IbaI
 CC derivatives, which are capable of inhibiting the function of cells with
 CC monocyte or macrophage activity. These can be used as immunomodulators to
 CC prevent and treat diseases caused by a decrease or increase in the
 CC activity or the function of macrophages or an activator or an inhibitor
 CC of the function of cells of macrophage type. The present sequence is a
 CC PCR primer used in the exemplification of the invention
 XX

SQ Sequence 20 BP; 7 A; 5 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1465 GAGAGCCAGAGCCAAAG 1483

DB 1 GAGAGCCATGAGCCAAAG 19

RESULT 709

AAH17425/C

ID AAD17425 standard; DNA; 20 BP.

XX AAD17425;

XX 29-NOV-2001 (first entry)

XX Human HZD3 gene specific reverse RT-PCR primer.

XX Secreted Frizzled-related protein; sFRP; chronic bronchitis; asthma;
 KW chronic obstructive pulmonary disease; COPD; antisense therapy; human;
 KW emphysema; reverse transcription PCR; RT-PCR primer; HZD3 gene; ss.

XX Homo sapiens.

XX WO200164717-A1.

XX 07-SEP-2001.

XX 28-FEB-2001; 2001WO-US006579.

XX 29-FEB-2000; 2000US-00514885.

XX (UYCO) UNIV COLUMBIA NEW YORK.

XX D'armiento J, Imai K;

XX WPI; 2001-557764/62.

XX Inhibition of apoptosis for the treatment or prevention of obstructive
 PT pulmonary disease comprises inhibiting expression of secreted Frizzled-
 PT related protein gene in lung cells.
 XX

XX Example 2; Page 35; 79pp; English.

XX The invention relates to a method for treating or preventing chronic
 CC obstructive pulmonary disease (COPD) such as emphysema, asthma and
 CC chronic bronchitis in a subject. The method involves administering to the

CC subject, an agent effective to inhibit apoptosis by inhibiting the
 CC expression of a secreted Frizzled-related protein (sFRP) gene. It is also
 CC useful in antisense therapy. sFRP gene antagonises the binding of human
 CC WNT gene to its cell surface receptor, Frizzled (FZ). The present
 CC sequence is human H2D3 (belongs to the family of FZ receptor) gene
 CC specific reverse transcription PCR (RT-PCR) primer. This primer is used
 CC in the identification of sFRP protein of the invention

XX
 SQ Sequence 20 BP; 3 A; 7 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1132 GAGTACTCGAGAGATCA 1150
 ||| |||||
 DB 20 GAGAAGCTGGAGAAGCTCA 2

RESULT 710
 AAI70331/C
 ID AAI70331 standard; DNA; 20 BP.

XX AAI70331;

AC
 DT 07-JAN-2002 (first entry)

XX Human ABC1 gene G3456C polymorphism region PCR primer FLA3456-r.

XX ATP binding cassette transporter 1; ABC1; human; lipid disorder;
 KW cholesterol; cardiovascular disease; inflammatory disease;
 KW antiinflammatory; antilipemic; antipsoriatic; dermatological;
 KW Tangier disease; coronary heart disease; diagnosis; gene therapy;
 KW LightCycler; polymorphism; analysis; PCR primer; ss.

XX Homo sapiens.

XX
 PN EP1136554-AL.

XX 26-SEP-2001.

XX 24-MAR-2000; 2000EP-00106401.

XX 24-MAR-2000; 2000EP-00106401.

XX (FARB) BAYER AG.

XX Schmitz G, Bodzioch M;

XX WPI; 2001-640389/74.

XX New adenosine triphosphate binding cassette transporter gene
 PT polymorphisms, useful for diagnosing and treating lipid disorders,
 PT cardiovascular diseases and inflammatory diseases.

XX Example 1; Page 7; 41pp; English.

XX The present sequence is that of reverse primer FLA3456-r, used in the
 CC LightCycler PCR analysis of the newly identified G3456C polymorphism of
 CC the human adenosine triphosphate (ATP) binding cassette transporter 1
 CC (ABC1) gene (see AAI70314). LightCycler analysis was performed to
 CC determine the frequency of ABC1 gene polymorphisms in the general
 CC population. 4 Polymorphisms have been newly identified in the gene. 3 Of
 CC these are significantly increased in men having low high density
 CC lipoprotein-cholesterol levels and established coronary heart disease.
 CC The use of the provided ABC1 polymorphisms for the diagnosis and
 CC treatment of lipid disorders, cardiovascular diseases, and inflammatory
 CC diseases (e.g. psoriasis, lupus erythematosus) is claimed

XX Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 173 TGACTCATTAATTGCTGCT 191
 |||||
 DB 19 TGACTCAAGGTTGCTGCT 1

RESULT 711

AA211342/C
 ID AAD21342 standard; DNA; 20 BP.

XX AAD21342;

XX 28-JAN-2002 (first entry)

XX Human ABC1 gene polymorphism detecting FLA3456-r PCR primer.

XX Human; ATP binding cassette transporter 1; ABC1; coronary heart disease;
 KW dermatological; atherosclerosis; cardiovascular; inflammatory disease;
 KW immunosuppressive; lupus erythematosus; rheumatoid arthritis; PCR primer;
 KW psoriasis; lipid disorder; antibacterial; septic shock; gene therapy; ss.

XX Homo sapiens.

XX EP1136552-AL.

XX 26-SEP-2001.

XX 20-MAR-2000; 2000EP-00105820.

XX 20-MAR-2000; 2000EP-00105820.

XX (FARB) BAYER AG.

XX Schmitz G, Bodzioch M;

XX WPI; 2001-640388/74.

XX New adenosine triphosphate binding cassette transporter-1 gene
 PT polymorphisms, useful for diagnosing and treating lipid disorders,
 PT cardiovascular diseases and inflammatory diseases.

XX Example 1; Page 11; 48pp; English.

XX The invention relates to four common polymorphisms in the gene encoding
 CC ATP-binding cassette transporter-1 (ABC1). ABC1 is associated with
 CC decreased ApoA-I mediated efflux of cholesterol. The polymorphisms in
 CC ABC1 directly affects cellular lipid homeostasis, which is a key factor
 CC in the atherogenic processes. The ABC1 polymorphisms are useful for
 CC diagnosing and treating lipid disorders, cardiovascular diseases
 CC (coronary heart disease, atherosclerosis) and inflammatory diseases
 CC (psoriasis, lupus erythematosus). The identification of ABC1 as a
 CC transporter for interleukin-1beta (IL-1beta) identifies this gene as a
 CC candidate for treatment of inflammatory diseases including rheumatoid
 CC arthritis and septic shock. The present sequence is a PCR primer used for
 CC detecting human ABC1 gene polymorphism

XX Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 173 TGACTCATTAATTGCTGCT 191

|||||
 DB 19 TGACTCAAGGTTGCTGCT 1

RESULT 712

AAC62060
 ID AAC62060 standard; DNA; 20 BP.

XX AAC62060;

XX 06-MAR-2001 (first entry)
 DT PCR primer for nucleic acids encoding the human EAA5 receptor.
 DE
 XX
 DE Human; excitatory amino acid 4 receptor; EAA 4 receptor;
 KW central nervous system receptor; PCR primer; ss.
 KW
 XX Homo sapiens.
 OS
 XX US6136544-A.
 PN
 XX 24-OCT-2000.
 PD
 XX 20-JUN-1996; 96US-00666221.
 PF
 XX 23-DEC-1993; 93US-00172188.
 PR
 XX 21-DEC-1994; 94WO-CA000705.
 PR
 XX (ALLX) ALLELIX BIOPHARMACEUTICALS INC.
 PA
 XX Nutt S, Kamboj R;
 PI
 XX WPI; 2001-048927/06.
 DR
 XX Isolated unedited human excitatory amino acid 4 receptor polynucleotides
 CC and proteins, useful for screening potential therapeutic compounds and
 CC drug candidates that interact with edited human central nervous system
 CC receptor forms.
 CC
 XX Example 8; Col 21; 9lpp; English.
 PS
 XX PCR primers AAC62056-60 were used to amplify nucleic acids encoding the
 CC human excitatory amino acid (EAA) 5 receptor. The synthesis this central
 CC nervous system (CNS) receptor in vivo is regulated by an editing
 CC mechanism. This editing results in the expression from a single human CNS
 CC receptor gene of structurally distinct forms of the CNS receptor protein.
 CC The specification describes a human EAA4 receptor. The human excitatory
 CC EAA4 receptor polynucleotide and the protein it encodes are useful for
 CC screening potential therapeutic compounds and selecting drug candidates
 CC that interact selectively with edited human central nervous system
 CC receptor forms
 CC
 XX Sequence 20 BP; 6 A; 4 C; 8 G; 2 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 14.2; DB 1; Length 20;
 ID AAH47253 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 AC
 XX 1242 TGGCGATGAGGACGAGAC 1260
 DT ||||| |||||
 DB 2 TGGCGATGACGAGAGGAC 20
 RESULT 713
 AAH47253
 ID AAH47253 standard; DNA; 20 BP.
 XX
 XX AAH47253;
 AC
 XX 30-NOV-2001 (first entry)
 DT
 XX Human C-PLACE1003238 gene related primer.
 DE
 XX C-PLACE1003238; guanosine triphosphate binding protein coupled receptor;
 KW cytosstatic; nootropic; neuroprotective; brain disease; PCR primer; ss.
 KW
 XX Homo sapiens.
 OS
 XX WO200109322-A1.
 XX
 XX 08-FEB-2001.
 PD
 XX

PF 28-JUL-2000; 2000WO-JP005069.
 XX
 XX 29-JUL-1999; 93JP-00248036.
 PR
 XX 27-AUG-1999; 93JP-00300253.
 PR
 XX 18-OCT-1999; 99US-0159590P.
 PR
 XX 11-JAN-2000; 2000JP-00118776.
 PR
 XX 17-FEB-2000; 2000US-0183322P.
 PR
 XX 02-MAY-2000; 2000JP-00183767.
 XX
 XX (HELI-) HELIX RES INST.
 PA
 XX Ota T, Isogai T, Nishikawa T, Hayashi K, Saito K, Yamamoto J;
 PI Ishii S, Sugiyama T, Wakamatsu A, Nagai K, Otsuki T, Kishimoto T;
 PI Yano K, Kanzaki K, Inoue Y;
 XX
 XX WPI; 2001-557266/62.
 DR
 XX New gene encoding guanosine triphosphate binding protein coupled
 PT receptor, and the protein and antibodies to it, for diagnosing and
 PT treating disease such as brain disease.
 XX
 XX Example 10; Page 36; 65pp; Japanese.
 PS
 XX The invention relates to a gene C-PLACE1003238 encoding a guanosine
 CC triphosphate binding protein coupled receptor. The protein can be
 CC expressed by standard recombinant methodology. The protein is useful in
 CC the diagnosis, prediction and treatment of disease associated with
 CC disorders of C-PLACE1003238 protein, and may be useful in brain disease
 CC and cancers, as the expression pattern was different in Alzheimer's
 CC disease, cancers, and normal tissue. The new materials are useful for
 CC developing diagnostics and treatment agents. The present sequence
 CC represents a PCR primer used during the course of the invention
 CC
 XX Sequence 20 BP; 5 A; 4 C; 4 G; 7 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 14.2; DB 1; Length 20;
 ID AAH03155/c Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 AC
 XX AAH03155;
 XX
 XX 15-JUN-2001 (first entry)
 DT
 XX Microorganism detection method related oligonucleotide SEQ ID NO: 179.
 DE
 XX Microorganism identification; pathogen; DNA sequencing; HLA type;
 KW bi-directional sequencing; infection; mutation detection; PCR primer; ss.
 KW
 XX Unidentified.
 OS
 XX US6214555-B1.
 PN
 XX 10-APR-2001.
 PD
 XX 13-MAY-1999; 99US-00311260.
 PF
 XX 01-MAY-1996; 96US-00640672.
 PR
 XX 19-JUL-1996; 96US-00684498.
 PR
 XX 27-FEB-1997; 97US-00807138.
 PR
 XX 20-JAN-1998; 98US-00009483.
 XX
 XX (VISI-) VISIBLE GENETICS INC.
 PA
 XX Leushner J, Hui M, Dunn JM, Lacroix J;
 PI

```

XX DR WPI; 2001-289718/30.
XX
XX Composition for detecting microorganisms, comprising deoxynucleotide
PT triphosphates, dideoxynucleotide triphosphate, and thermostable
PT polymerase to incorporate dideoxynucleotide triphosphate into extending
PT polymer.
XX
XX Disclosure; Col 113; 62pp; English.
XX
XX The present invention provides a composition containing 4 dNTPs and at
CC least one ddNTP and a thermally stable polymerase which incorporates
CC ddNTPs into an extending nucleic acid polymer at a rate of not less than
CC 0.4 times the rate of dNTP incorporation. This can be used with the PCR
CC primers provided in the invention to detect the presence of
CC microorganisms, such as Chlamydia trachomatis, HIV or human
CC papillomavirus, in a sample. In addition, it can be used to detect
CC mutations in a specific gene, to determine HLA type, and to produce
CC sequencing fragments for further study
XX
XX Sequence 20 BP; 6 A; 10 C; 1 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 948 GCTGATGCTGGAGGCGGT 966
DB 19 GCTGATGTTGGAGTAGGT 1
RESULT 715
AAS10291
ID AAS10291 standard; DNA; 20 BP.
XX
XX AAS10291;
XX
XX 24-OCT-2001 (first entry)
XX
XX Antisense oligonucleotide for human integrin alpha 4, ISIS 107243.
DE
XX Integrin alpha 4; antisense; very late antigen 4; VLA4;
XX autoimmune disease; inflammatory disease; rheumatoid arthritis;
XX multiple sclerosis; tumour metastasis; melanoma; asthma; psoriasis;
XX allergy; Grave's disease; Hashimoto's thyroiditis; oligonucleotide;
XX systemic lupus erythematosus; allograft rejection; ISIS 107243; ss.
XX
XX Homo sapiens.
XX Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Other= Phosphorothioate backbone"
FT modified_base 1..20
FT /*tag= b
FT /mod_base= OTHER
FT /note= "Other= All cytosines are 5-methyl cytosines"
FT modified_base 1..3
FT /*tag= c
FT /mod_base= OTHER
FT /note= "Other= 2' methoxyethoxy residues"
FT modified_base 4..12
FT /*tag= d
FT /mod_base= OTHER
FT /note= "Other= 2' deoxy residues"
FT modified_base 13..20
FT /*tag= e
FT /mod_base= OTHER
FT /note= "Other= 2' methoxyethoxy residues"
XX
XX US6258790-B1.

```

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XX PD 10-JUL-2001.
XX
XX 19-AUG-1999; 99US-00377309.
XX
XX 05-OCT-1998; 98US-00166203.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Bennett CF, Condon TP, Cowsett LM;
PI WPI; 2001-450381/48.
XX
XX Composition for treating inflammatory and autoimmune diseases, comprises
PT antisense compound targeted to nucleic acid molecule encoding integrin
PT alpha4 and inhibit expression of integrin alpha4.
XX
XX Claim 12; Col 49; 49pp; English.
XX
XX The sequence is an antisense oligonucleotide targeting human integrin 4,
XX a protein involved in autoimmune and inflammatory diseases. The invention
XX relates to antisense inhibitors of integrin alpha 4 which target and
XX inhibit expression of integrin alpha 4. The antisense molecules are
XX useful for inhibiting the expression of integrin alpha4 in human cells or
XX tissues, treating an animal having a disease or condition associated with
XX expression of integrin alpha4, e.g., inflammatory disease or condition,
XX autoimmune disease or condition including rheumatoid arthritis, multiple
XX sclerosis and tumour metastases, melanoma, asthma, psoriasis, allergy,
XX Grave's disease, Hashimoto's thyroiditis, systemic lupus erythematosus
XX and allograft rejection, and diseases or conditions characterised by
XX leukocyte migration into affected tissues, preferably central nervous
XX system tissues. The antisense molecules are also useful for reducing the
XX levels of VLA-4 and alpha4beta7 integrin in human cells or tissues, and
XX reducing the adherence of cells of a first type e.g., melanoma cells or
XX lymphocytes, to cells of a second type e.g., endothelial cells, by
XX inhibiting integrin alpha4 expression and thus decreasing adhesion of
XX cells
XX
XX Sequence 20 BP; 7 A; 8 C; 1 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 296 CCATCCGTCGATACAT 314
DB 1 CCAGCCTTCACATAACAT 19
RESULT 716
AAH46134/C
ID AAH46134 standard; DNA; 20 BP.
XX
XX AAH46134;
XX
XX 11-SEP-2001 (first entry)
XX
XX Human CLCA1 sequencing primer PR29, SEQ ID NO:36.
XX
XX Human CLCA1; goblet cell; mouse Gob-5 orthologue; drug screening;
XX expression inhibition; antisense therapy; gene therapy;
XX chronic obstructive pulmonary disease; bronchial asthma; antiasthmatic;
XX sequencing primer; ss.
XX
XX Homo sapiens.
XX
XX WO200138530-A1.
XX
XX 31-MAY-2001.
XX
XX 22-NOV-2000; 2000WO-JP008232.
XX
XX 24-NOV-1999; 99JP-0033479.
XX

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```
PR 27-APR-2000; 2000JP-00127589.
XX (TAKE ) TAKEDA CHEM IND LTD.
XX Nakanishi A, Morita S;
XX WPI; 2001-355935/37.
XX New antisense nucleotide, useful for treatment and prevention of
PT bronchial asthma and chronic obstructive pulmonary disease.
XX Example 5; Page 97; 104pp; Japanese.
XX The invention relates to an antisense nucleotide targetted to the mouse
CC Gob-5 gene (coding sequence shown in AAH46101) or its human counterpart,
CC the CLCA1 gene (coding sequence shown in AAH46102). The invention also
CC relates to an antibody specific for the Gob-5 protein, medical and
CC diagnostic compositions containing the antisense nucleotide or the
CC antibody, and methods and kits for screening for compounds which inhibit
CC the protein. Gob-5 and CLCA1 are proteins expressed by goblet cells. The
CC antisense oligonucleotides and antibody are therefore useful for the
CC treatment and prevention of bronchial asthma and chronic obstructive
CC pulmonary disease. Sequences AAH46125-AAH46136 represent primers used in
CC an exemplification of the invention to sequence human CLCA1 cDNA
CC (AAH46124)
XX
XX Sequence 20 BP; 2 A; 6 C; 4 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. NO. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1220 AGGAGCCATCCCTGAGGA 1238
DB 20 AGGAGCCCACTCTGAGGA 2
RESULT 717
AAH46133
ID AAH46133 standard; DNA; 20 BP.
XX
AC AAH46133;
XX
XX 11-SEP-2001 (first entry)
XX Human CLCA1 sequencing primer PR28, SEQ ID NO:35.
XX Human CLCA1; goblet cell; mouse Gob-5 orthologue; drug screening;
XX expression inhibition; antisense therapy; gene therapy;
XX chronic obstructive pulmonary disease; bronchial asthma; antiasthmatic;
XX sequencing primer; ss.
XX Homo sapiens.
XX
XX WO200138530-A1.
XX
XX 31-MAY-2001.
XX
XX 22-NOV-2000; 2000WO-JP008232.
XX
XX 24-NOV-1999; 99JP-00333479.
XX
XX 27-APR-2000; 2000JP-00127589.
XX (TAKE ) TAKEDA CHEM IND LTD.
XX
XX Nakanishi A, Morita S;
XX WPI; 2001-355935/37.
XX New antisense nucleotide, useful for treatment and prevention of
PT bronchial asthma and chronic obstructive pulmonary disease.
XX Example 5; Page 97; 104pp; Japanese.
```

```
XX The invention relates to an antisense nucleotide targetted to the mouse
CC Gob-5 gene (coding sequence shown in AAH46101) or its human counterpart,
CC the CLCA1 gene (coding sequence shown in AAH46102). The invention also
CC relates to an antibody specific for the Gob-5 protein, medical and
CC diagnostic compositions containing the antisense nucleotide or the
CC antibody, and methods and kits for screening for compounds which inhibit
CC the protein. Gob-5 and CLCA1 are proteins expressed by goblet cells. The
CC antisense oligonucleotides and antibody are therefore useful for the
CC treatment and prevention of bronchial asthma and chronic obstructive
CC pulmonary disease. Sequences AAH46125-AAH46136 represent primers used in
CC an exemplification of the invention to sequence human CLCA1 cDNA
CC (AAH46124)
XX
XX Sequence 20 BP; 8 A; 4 C; 6 G; 2 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. NO. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1220 AGGAGCCATCCCTGAGGA 1238
DB 1 AGGAGCCCACTCTGAGGA 19
RESULT 718
AAS03048
ID AAS09048 standard; DNA; 20 BP.
XX
AC AAS09048;
XX
XX 26-SEP-2001 (first entry)
XX Human MEK2 antisense oligonucleotide 113854.
XX Human; mitogen-activated protein kinase kinase kinase 2; MAP; MEK2;
XX MEK kinase 2; MAP/ERK kinase kinase 2; immunological disorder;
XX inflammatory disorder; hyperproliferative disorder; cancer; antisense;
XX phosphorothioate; ss.
XX Homo sapiens.
XX
XX Key Location/Qualifiers
FT modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "OTHER= phosphorothioate internucleotide linkages.
FT Some bases especially bases 1-5 and bases 16-20 are 2'-
FT methoxyethyl (2'-MOE) bases, bases 6-15 are 2'-
FT deoxynucleotides and all cytidine bases are 5'-
FT methylcytidines"
XX
XX WO200152863-A1.
XX
XX 26-JUL-2001.
XX
XX 16-JAN-2001; 2001WO-US001361.
XX
XX 20-JAN-2000; 2000US-00488744.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Monia BP, Gaarde WA, Ward DT, Freier SM, Wyatt JR;
XX WPI; 2001-442246/47.
XX
XX Antisense compound 8 to 30 nucleobases in length targetted to a nucleic
XX acid molecule encoding MEK2, useful for the treatment of an
XX immunological, inflammatory or hyperproliferative disorder.
XX Example 15; Page 79; 105pp; English.
XX
XX The present sequence for human MEK2 antisense oligonucleotide 113854 is
```


CC 1 of various novel human mitogen-activated protein (MAP) kinase kinase
 CC kinase 2 (MEKK2, also known as MEK kinase 2 and MAP/ERK kinase 2)
 CC antisense oligonucleotides (AAS09045-AAS09122) which specifically
 CC hybridise with and inhibit the expression of MEKK2. The antisense
 CC oligonucleotides can be used in a composition to modulate the expression
 CC of MEKK2 (AAU03598). The antisense oligonucleotides are useful for
 CC inhibiting the expression of MEKK2 in the treatment of immunological
 CC disorders, inflammatory disorders and hyperproliferative disorders e.g.
 CC cancer
 XX
 SQ Sequence 20 BP; 10 A; 3 C; 5 G; 2 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1137 CCTGGAGAGATCAACAG 1155
 Db 1 CCGTGAGAGATAAACAG 19
 RESULT 719
 ABK90287
 ID ABK90287 standard; DNA; 20 BP.
 XX AC ABK90287;
 XX
 XX 21-OCT-2002 (first entry)
 DT
 DE Bcl-2-targeting antisense oligonucleotide #20.
 XX
 XX Antisense; ss; probe; Bcl-2; cell proliferative disorder; cancer; CRE;
 KW cAMP response element; bacterial infection; viral infection;
 KW inflammation; anaphylaxis; allergy; arthritis; asthma; cytostatic;
 KW autoimmune disorder; parasitic infection; virucide; hyperplasia;
 KW tumourigenesis; hepatitis B infection; human.
 XX
 OS Homo sapiens.
 XX
 PN WO200257480-A2.
 XX
 XX 25-JUL-2002.
 XX
 XX 22-JAN-2002; 2002WO-US001967.
 PF
 XX 22-JAN-2001; 2001US-0263244P.
 PR
 XX (GENT-) GENTA INC.
 XX
 XX Klem RE;
 XX
 XX WPI; 2002-590754/63.
 DR
 XX Hybrid oligomer comprises a cyclic AMP response element sequence and a
 PT sequence that hybridizes to the bcl-2 pre-mRNA or mRNA useful for
 PT preventing or treating cell-proliferative disorders e.g., cancer.
 XX
 PS Disclosure; Page 13; 78pp; English.
 XX
 XX The invention relates to a hybrid oligomer comprising a cyclic AMP
 CC response element (CRE) sequence and a sequence that hybridises to the bcl
 CC -2 pre-mRNA or mRNA. Also included are: (1) inhibiting the growth of
 CC cancer cells in vitro, which comprises contacting the cancer cells with a
 CC hybrid oligomer or a bcl-2 antisense oligomer and a CRE decoy oligomer;
 CC (2) treating or preventing cancer in a human, which comprises
 CC administering a hybrid oligomer or a bcl-2 antisense oligomer and a CRE
 CC decoy oligomer; and (3) a pharmaceutical composition comprising a hybrid
 CC oligomer or a bcl-2 antisense oligomer and a CRE decoy oligomer, and a
 CC carrier. The pharmaceutical composition of the invention is useful for
 CC preventing or treating cell-proliferative disorders e.g., cancer,
 CC hyperplasia or tumourigenesis and also bacterial infection, viral
 CC infection, inflammation, anaphylaxis, allergy, arthritis, asthma,
 CC autoimmune disorders and parasitic infection. The CRE decoy oligomer and

CC bcl-2 antisense oligomer are also useful for preventing or treating
 CC hepatitis B virus infection. The hybrid oligomers can also be used for
 CC screening candidate transcription factors or other molecules e.g., gene
 CC regulatory proteins or for diagnostic assays. The present sequence is a
 CC Bcl-2 antisense oligonucleotide
 XX
 SQ Sequence 20 BP; 1 A; 6 C; 13 G; 0 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 6 GAGCGCGCGCGCGGAGGC 24
 Db 1 GCGCGCGCGCGCGGAGGC 19
 RESULT 720
 ABK85426
 ID ABK85426 standard; DNA; 20 BP.
 XX AC ABK85426;
 XX
 XX 29-AUG-2003 (revised)
 DT 14-AUG-2002 (first entry)
 XX
 XX Oligonucleotide #4 binding to specific site of HIV-1 RNA.
 DE
 XX Human immunodeficiency virus type 1; HIV-1 detection method; primer;
 KW probe; ss.
 KW
 XX Human immunodeficiency virus 1.
 OS
 XX Human immunodeficiency virus 1.
 XX
 PN EP1203826-A2.
 XX
 XX 08-MAY-2002.
 PD
 XX 30-OCT-2001; 2001EP-00125378.
 PF
 XX 30-OCT-2000; 2000JP-00334937.
 PR
 XX (TOYJ) TOSOH CORP.
 XX
 XX PA
 XX Ishizuka T, Ishiguro T, Saitoh J;
 PI
 XX WPI; 2002-473032/51.
 DR
 XX An oligonucleotide useful for detection of an RNA derived from HIV-1 in
 PT clinical tests and diagnosis.
 PT
 XX Claim 1; Page 12; 34pp; English.
 PS
 XX The present invention relates to oligonucleotides binding to specific
 CC sites of human immunodeficiency virus type 1 (HIV-1) RNA. The
 CC oligonucleotides are useful for detecting HIV-1 in clinical tests and
 CC diagnosis. The oligonucleotides provide simple, speedy and sensitive
 CC detection of HIV-1 RNA which can bind to an intramolecularly free region
 CC of the genomic RNA of HIV-1 at relatively low and constant temperatures.
 CC The detection method comprises synthesising a cDNA by the action of an
 CC RNA-dependent DNA polymerase by using a specific sequence in an RNA
 CC derived from HIV-1 antipated in a sample as a template, a first primer
 CC containing a sequence complementary to the specific sequence and a second
 CC primer which additionally has a promoter sequence for the RNA polymerase at
 CC the 5' end. ABK85423-ABK85440 represent oligonucleotides binding to
 CC specific sites of HIV-1 RNA. They can be used either as first primers or
 CC probes. (Updated on 29-AUG-2003 to standardise OS field)
 XX
 SQ Sequence 20 BP; 4 A; 3 C; 0 G; 13 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

```
OY 1574 ATTATATATTTCTATTTTC 1592
DB 1 AATTATATTTTCTTTC 19

RESULT 721
AAD34757/c
ID AAD34757 standard; DNA; 20 BP.
XX
AC AAD34757;
XX
DT 16-JUL-2002 (first entry)
DE Human MEK3 cDNA targetted antisense oligonucleotide ISIS #123009.
XX
KW Human; MAP/ERK kinase kinase 3; MEK3; mitogen activated protein kinase;
KW MAP; ERK; extracellular signal regulated kinase; infection; cytostatic;
KW antisense therapy; tumour formation; phosphorothioate backbone;
KW inflammation; antisense; ss.
XX
OS Homo sapiens.
OS Synthetic.
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone"
FT modified_base 1..5
FT /tag= b
FT /mod_base= OTHER
FT /note= "Methoxyethyl residues"
FT modified_base 1
FT /tag= d
FT /mod_base= m5c
FT modified_base 3
FT /tag= e
FT /mod_base= m5c
FT modified_base 5
FT /tag= f
FT /mod_base= m5c
FT modified_base 6
FT /tag= g
FT /mod_base= m5c
FT modified_base 8
FT /tag= h
FT /mod_base= m5c
FT modified_base 9
FT /tag= i
FT /mod_base= m5c
FT modified_base 13
FT /tag= j
FT /mod_base= m5c
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT modified_base 18
FT /note= "Methoxyethyl residues"
FT /tag= k
FT /mod_base= m5c
FT modified_base 20
FT /tag= l
FT /mod_base= m5c
XX
PN WO200220550-A1.
XX
PD 14-MAR-2002.
XX
PF 07-SEP-2001; 2001WO-US028118.
XX
PR 08-SEP-2000; 2000US-00658688.
XX
```

```
PA (ISIS-) ISIS PHARM INC.
XX
PI Ward DT, Gaarde WA, Monia BP, Wyatt JR;
XX
DR WPI; 2002-329863/36.
XX
PT New antisense oligonucleotides targeted to nucleic acid encoding MAP/ERK
PT kinase kinase 3 (MEK3), useful for inhibiting the expression of MEK3
PT and for treating a disease or condition associated with the expression of
PT MEK3.
XX
PS Claim 3; Page 90; 116pp; English.
XX
CC The invention relates to antisense oligonucleotides targetted to nucleic
CC acids encoding mitogen activated protein kinase (MAP)/extracellular
CC signal regulated (ERK) kinase kinase 3 (MEK3) or a splice variant of
CC MEK3. MEK3 is an ubiquitously expressed serine-threonine kinase and
CC activates only the ERK and JNK/SAPK pathways. The antisense compound is
CC useful for inhibiting the expression of MEK3 and for treating a disease
CC or condition associated with the expression of MEK3. These may also be
CC used as research reagents and diagnostics, to distinguish between
CC functions of various members of a biological pathway, and in the
CC treatment of a disease or disorder, which can be treated by modulating
CC the expression of MEK3. The antisense compounds are further useful
CC prophylactically, e.g. to prevent or delay infection, inflammation or
CC tumour formation, and as probes or primers. The present sequence is an
CC antisense oligonucleotide targetted towards human MEK3 cDNA
XX
SQ Sequence 20 BP; 1 A; 9 C; 2 G; 8 T; 0 U; 0 Other;
Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
OY 1450 GAGAAACCAAGGAGGAGA 1468
DB 20 GAGACAGCAAGGAGGTGA 2
|||||
RESULT 722
AAD41805
ID AAD41805 standard; DNA; 20 BP.
XX
AC AAD41805;
XX
DT 30-OCT-2002 (first entry)
XX
DE Human RECQL2 antisense oligonucleotide, ISIS #137585.
KW Antisense; RECQL2; Bloom's disorder; prophylaxis; infection; tumour;
KW inflammation; therapy; human; phosphorothioate; ss.
XX
OS Homo sapiens.
OS Synthetic.
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone"
FT modified_base 1..5
FT /tag= b
FT /mod_base= OTHER
FT modified_base 5
FT /note= "2'-methoxyethyl nucleotides"
FT /tag= d
FT /mod_base= m5c
FT modified_base 11
FT /tag= e
FT /mod_base= m5c
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
```

```

PT /note= "2'-methoxyethyl nucleotides"
XX
PN US6399378-B1.
XX
PD 04-JUN-2002.
XX
XX 01-MAR-2001; 2001US-00798096.
XX
PF 01-MAR-2001; 2001US-00798096.
XX
PR 01-MAR-2001; 2001US-00798096.
XX
PA (ISIS-) ISIS PHARM INC.
XX
XX Ward DT, Watt AT;
XX
XX WPI; 2002-535979/57.
XX
XX Antisense compounds targeted to nucleic acids encoding RECQL2 associated
PT with Bloom's disorder, for modulating RECQL2 expression and treating
PT diseases e.g. tumors associated with expression of the RECQL2 in humans.
XX
XX Claim 3; Col 45; 86pp; English.
XX
XX The invention relates to antisense compounds targetted to nucleic acid
CC encoding RECQL2 (gene associated with Bloom's disorder) to inhibit the
CC expression of RECQL2. Antisense compounds of the invention are useful for
CC treating diseases associated with expression of RECQL2, in humans. They
CC are useful for diagnostics, therapeutics and as research reagent, e.g.
CC prophylactically to prevent or delay infection, inflammation or tumour
CC formation. They are also useful in antisense therapy. The present
CC sequence is an antisense oligonucleotide targetted to human RECQL2 DNA
XX
XX Sequence 20 BP; 5 A; 2 C; 5 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 575 TGTACATTGCATTGATAT 593
DB 1 TGTTCATTGGCATTGATAT 19
RESULT 723
ABN99675/C
ID ABN99675 standard; DNA; 20 BP.
XX
AC ABN99675;
XX
XX 16-AUG-2002 (first entry)
XX
DE Human clusterin inhibiting antisense oligonucleotide 9.
XX
XX Human; antisense inhibition; antisense oligonucleotide; clusterin;
KW hypercholesterolaemia; cardiovascular disorder; ss;
KW hyperproliferative disorder; hyperlipidemic disorder;
KW phosphorothioate backbone; 2'-O-methoxyethyl wing.
XX
OS Homo sapiens.
XX
XX WO200222635-A1.
XX
XX 21-MAR-2002.
XX
XX 10-SEP-2001; 2001WO-US028235.
XX
XX 11-SEP-2000; 2000US-00659791.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Monia BP, Freier SM;
XX
XX WPI; 2002-404805/43.
XX
XX
PT Novel antisense compound targetted to nucleic acid molecule encoding
PT clusterin, useful for treating animal having disease associated with
PT clusterin such as hyperlipidemic disorder, cardiovascular disorder.
XX
XX Claim 3; Page 83; 125pp; English.
XX
XX The invention comprises antisense oligonucleotides that are capable of
CC inhibiting expression of the human clusterin gene. The antisense
CC oligonucleotides of the invention are useful for inhibiting the
CC expression of clusterin in cells. The antisense oligonucleotides are also
CC useful for treating an animal with a disease or condition associated with
CC clusterin (e.g. hypercholesterolaemia; cardiovascular disorders;
CC hyperproliferative disorders; and hyperlipidemic disorders). The present
CC DNA sequence represents a clusterin antisense oligonucleotide of the
CC invention. NOTE: The present DNA sequence has a phosphorothioate backbone
CC and also contains 2'-O-methoxyethyl wings
XX
XX Sequence 20 BP; 2 A; 7 C; 2 G; 9 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1401 GGATGAAAAAGAGAAAGAC 1419
DB 19 GGGTGAACACAGATAAAGAC 1
RESULT 724
ABN83195/C
ID ABN83195 standard; DNA; 20 BP.
XX
AC ABN83195;
XX
XX 13-SEP-2002 (first entry)
XX
XX Transcriptional regulator PCR primer #9.
XX
XX Transcriptional regulator; nootropic; neuroprotective; aging;
KW cognition failure; dementia; Alzheimer's disease; PCR; primer; ss.
XX
XX Unidentified.
XX
XX WO200253736-A1.
XX
XX 11-JUL-2002.
XX
XX 17-DEC-2001; 2001WO-JF011063.
XX
XX 27-DEC-2000; 2000JP-00398548.
XX
XX 19-MAR-2001; 2001JP-00077740.
XX
XX (SUMO ) SUMITOMO CHEM CO LTD.
XX
XX Ohe N;
XX
XX WPI; 2002-528862/56.
XX
XX Examining the ability to control nerve plasticity depending on a
PT transcriptional regulator, useful in diagnosis and developing drugs for
PT cognition failure due to aging, dementia and Alzheimer's disease.
XX
XX Example 5; Page 37; 127pp; Japanese.
XX
XX The invention relates to a novel method for examining the ability to
CC control nerve cell plasticity depending on a transcriptional regulator.
CC The method of the invention has nootropic and neuroprotective activity.
CC The method is useful in diagnosis and developing drugs for improving or
CC treating cognition failure due to aging, dementia and Alzheimer's
CC disease. The sequence represents a PCR primer used in example 5 of the
CC invention
XX
XX Sequence 20 BP; 0 A; 6 C; 8 G; 6 T; 0 U; 0 Other;
SQ

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Query Match          0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1637 GGACAGAAACCAAGGCCCC 1655
    ||||| ||||| |||||
Db 19 GGACAGACACCAGGCCAC 1

RESULT 725
ABL43693
ID ABL43693 standard; DNA; 20 BP.
XX
AC ABL43693;
XX
DT 11-APR-2002 (first entry)
XX
DE Human chromosome lp36-35 PCR primer SEQ ID NO:737.
XX
KW Human; chromosome lp36-35; chromosome 21q22.1; genetic analysis; genome;
KW PCR primer; ss.
XX
OS Homo sapiens.
XX
FN JP2001321190-A.
XX
PD 20-NOV-2001.
XX
PF 12-MAR-2001; 2001JP-00068285.
XX
PR 10-MAR-2000; 2000JP-00066716.
XX
PA (RIKA ) RIKAGAKU KENKYUSHO.
PA (GENO-) GENOTEX YG.
XX
DR WPI; 2002-144136/19.
XX
PT Arraying genome clones.
XX
PS Claim 4; Page 19; 528pp; Japanese.
XX
CC The present invention describes a method of arraying genome clones. The
CC method comprises: (a) clones of the genomic libraries contained in
CC multiwell plates numbered for discrimination are mixed in each of the
CC multiwell plates; (b) a primer designed based on the chromosome marker
CC sequence is added to the mixture to carry out an amplification reaction;
CC (c) a signal corresponding to the marker is detected from the resultant
CC amplified product to specify the discrimination Nos. of the multiwell
CC plates containing the clones having said marker sequence; (d) the order
CC of the markers is changed so that the same discrimination Nos. succeed to
CC the maximum in the specified discrimination Nos. to array the multiwell
CC plates; (e) the clones in the multiwell plates of the specified
CC discrimination Nos. are mixed respectively in each wells of longitudinal
CC and lateral directions; (f) the mixed clones are cultured and the
CC resultant cultures are amplified by using the above primer; (g) signals
CC are detected from the amplified products; (h) the clones in the multiwell
CC plates are specified from the detected result; and (i) the clones are
CC reconstituted as the positions on the chromosome and arrayed. The
CC microarray is useful for gene analysis. ABL42957 to ABL45322 represent
CC PCR primers for human chromosome lp36-35 DNA, and ABL45323 to ABL45634
CC represent PCR primers for human chromosome 21q22.1, which are
CC specifically claimed for use in the present invention
XX
SQ Sequence 20 BP; 7 A; 4 C; 7 G; 2 T; 0 U; 0 Other;

Query Match          0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 670 GAGTACTTCCCGAGCACTG 688
    ||||| ||||| |||||
Db 2 GAGAACTGCCAAGGAACGTG 20

Query Match          0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1457 CCAAGGAGGAGAGGCCAGA 1475
    ||||| ||||| |||||
Db 2 CCAAGAGAGAGACCCAGA 20

RESULT 727
ABL43760/c
ID ABL43760 standard; DNA; 20 BP.
XX
AC ABL43760;
XX

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RESULT 726
ABL43355
ID ABL43355 standard; DNA; 20 BP.
XX
AC ABL43355;
XX
DT 11-APR-2002 (first entry)
XX
DE Human chromosome lp36-35 PCR primer SEQ ID NO:399.
XX
KW Human; chromosome lp36-35; chromosome 21q22.1; genetic analysis; genome;
KW PCR primer; ss.
XX
OS Homo sapiens.
XX
FN JP2001321190-A.
XX
PD 20-NOV-2001.
XX
PF 12-MAR-2001; 2001JP-00068285.
XX
PR 10-MAR-2000; 2000JP-00066716.
XX
PA (RIKA ) RIKAGAKU KENKYUSHO.
PA (GENO-) GENOTEX YG.
XX
DR WPI; 2002-144136/19.
XX
PT Arraying genome clones.
XX
PS Claim 4; Page 12; 528pp; Japanese.
XX
CC The present invention describes a method of arraying genome clones. The
CC method comprises: (a) clones of the genomic libraries contained in
CC multiwell plates numbered for discrimination are mixed in each of the
CC multiwell plates; (b) a primer designed based on the chromosome marker
CC sequence is added to the mixture to carry out an amplification reaction;
CC (c) a signal corresponding to the marker is detected from the resultant
CC amplified product to specify the discrimination Nos. of the multiwell
CC plates containing the clones having said marker sequence; (d) the order
CC of the markers is changed so that the same discrimination Nos. succeed to
CC the maximum in the specified discrimination Nos. to array the multiwell
CC plates; (e) the clones in the multiwell plates of the specified
CC discrimination Nos. are mixed respectively in each wells of longitudinal
CC and lateral directions; (f) the mixed clones are cultured and the
CC resultant cultures are amplified by using the above primer; (g) signals
CC are detected from the amplified products; (h) the clones in the multiwell
CC plates are specified from the detected result; and (i) the clones are
CC reconstituted as the positions on the chromosome and arrayed. The
CC microarray is useful for gene analysis. ABL42957 to ABL45322 represent
CC PCR primers for human chromosome lp36-35 DNA, and ABL45323 to ABL45634
CC represent PCR primers for human chromosome 21q22.1, which are
CC specifically claimed for use in the present invention
XX
SQ Sequence 20 BP; 10 A; 5 C; 5 G; 0 T; 0 U; 0 Other;

Query Match          0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1457 CCAAGGAGGAGAGGCCAGA 1475
    ||||| ||||| |||||
Db 2 CCAAGAGAGAGACCCAGA 20

RESULT 727
ABL43760/c
ID ABL43760 standard; DNA; 20 BP.
XX
AC ABL43760;
XX

```

DT 11-APR-2002 (first entry)
 DE Human chromosome 1p36-35 PCR primer SEQ ID NO:804.
 XX
 KW Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
 KW PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN JP2001321190-A.
 XX
 PD 20-NOV-2001.
 XX
 XX 12-MAR-2001; 2001JP-00068285.
 PF
 XX 10-MAR-2000; 2000JP-00066716.
 PR
 XX (RIKA) RIKAGAKU KENKYUSHO.
 PA
 PA (GENO-) GENOTEX YG.
 XX
 XX WPI; 2002-144136/19.
 DR
 XX
 PT Arraying genome clones.
 PS
 PS Claim 4; Page 20; 528pp; Japanese.
 XX
 CC The present invention describes a method of arraying genome clones. The
 CC method comprises: (a) clones of the genomic libraries contained in
 CC multiwell plates numbered for discrimination are mixed in each of the
 CC multiwell plates; (b) a primer designed based on the chromosome marker
 CC sequence is added to the mixture to carry out an amplification reaction;
 CC (c) a signal corresponding to the marker is detected from the resultant
 CC amplified product to specify the discrimination Nos. of the multiwell
 CC plates containing the clones having said marker sequence; (d) the order
 CC of the markers is changed so that the same discrimination Nos. succeed to
 CC the maximum in the specified discrimination Nos. to array the multiwell
 CC plates; (e) the clones in the multiwell plates of the specified
 CC discrimination Nos. are mixed respectively in each wells of longitudinal
 CC and lateral directions; (f) the mixed clones are cultured and the
 CC resultant cultures are amplified by using the above primer; (g) signals
 CC are detected from the amplified products; (h) the clones in the multiwell
 CC plates are specified from the detected result; and (i) the clones are
 CC reconstituted as the positions on the chromosome and arrayed. The
 CC microarray is useful for gene analysis. ABL42957 to ABL45322 represent
 CC PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634
 CC represent PCR primers for human chromosome 21q22.1, which are
 CC specifically claimed for use in the present invention
 XX
 SQ Sequence 20 BP; 6 A; 2 C; 8 G; 4 T; 0 U; 0 Other;
 XX
 Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1549 TCACGTTCTTCTCCCAACC 1567
 DB |||||
 20 TCAGGATCTTCCCTACC 2
 XX
 RESULT 728
 ABA81912/c
 ID ABA81912 standard; DNA; 20 BP.
 XX
 AC ABA81912;
 XX
 DT 25-JAN-2002 (first entry)
 XX
 DE Rat G-protein serotonin receptor PCR primer #11.
 XX
 KW Microorganism detection; capture oligonucleotide; probe; cancer; biochip;
 KW polymorphism detection; genetic disease diagnosis; microarray;
 KW PCR primer; ss.
 XX
 XX (UYNO-) UNIV NOTRE-DAME DE LA PAIX.
 PA
 PI Remacle J, Hamels S, Zammattéo N, Lockman L, Dufour S;
 PI Alexandre I, De Longueville F;
 XX
 XX WPI; 2002-010921/01.

OS Rattus sp.
 XX
 PN WO200177372-A2.
 XX
 PD 18-OCT-2001.
 XX
 XX 26-MAR-2001; 2001WO-BE000053.
 PF
 XX 24-MAR-2000; 2000EP-00870055.
 PR
 PR 15-SEP-2000; 2000EP-00870204.
 XX
 XX (UYNO-) UNIV NOTRE-DAME DE LA PAIX.
 PA
 XX Remacle J, Hamels S, Zammattéo N, Lockman L, Dufour S;
 PI Alexandre I, De Longueville F;
 XX
 XX WPI; 2002-010921/01.
 DR
 XX
 PT Identifying or quantifying organisms or genes, useful e.g. for diagnosis,
 PT by detecting specific nucleotide sequences present among several
 PT homologous sequences.
 XX
 PS Example 12; Page 38; 56pp; English.
 XX
 CC The present invention provides a method of identifying or quantitating a
 CC microorganism in a sample by detecting its nucleotide sequence from
 CC amongst homologous sequences. The method can be used to detect
 CC microorganisms and polymorphisms, and to diagnosis genetic diseases
 CC including cancer. The present sequence is a PCR primer used in the
 CC exemplification of the invention
 XX
 SQ Sequence 20 BP; 4 A; 5 C; 5 G; 6 T; 0 U; 0 Other;
 XX
 Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 628 ACCACGACCGGGTCATGA 646
 DB |||||
 20 ATCACGCACAGGGTCATGA 2
 XX
 RESULT 729
 ABA81919/c
 ID ABA81919 standard; DNA; 20 BP.
 XX
 AC ABA81919;
 XX
 DT 25-JAN-2002 (first entry)
 XX
 DE Rat G-protein serotonin receptor PCR primer #16.
 XX
 KW Microorganism detection; capture oligonucleotide; probe; cancer; biochip;
 KW polymorphism detection; genetic disease diagnosis; microarray;
 KW PCR primer; ss.
 XX
 XX Rattus sp.
 OS
 XX WO200177372-A2.
 PN
 PD 18-OCT-2001.
 XX
 XX 26-MAR-2001; 2001WO-BE000053.
 PF
 XX 24-MAR-2000; 2000EP-00870055.
 PR
 PR 15-SEP-2000; 2000EP-00870204.
 XX
 XX (UYNO-) UNIV NOTRE-DAME DE LA PAIX.
 PA
 XX Remacle J, Hamels S, Zammattéo N, Lockman L, Dufour S;
 PI Alexandre I, De Longueville F;
 XX
 XX WPI; 2002-010921/01.

CC (see ABV73816-41) that have been tested as AIDS therapeutic agents. In
 CC anti-HIV-1 assays, the oligonucleotide showed higher antiviral activity
 CC than AZT. Claimed oligonucleotides of the present invention have low
 CC toxicity against cells, are membrane permeable, working outside of cells
 CC to inhibit viral attachment of HIV, have a wide antiviral activity
 CC against a broad spectrum of HIV variants, are not active against other
 CC viruses including SIV, and in some cases are not affected by the presence
 CC of serum
 XX
 SQ Sequence 20 BP; 7 A; 7 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1245 CGATGACGACGACGAC 1263
 ||||| ||||| |||||
 Db 2 CGACGACGACGACGAC 20

RESULT 734
 ABL56199/c
 ID ABL56199 standard; DNA; 20 BP.

XX AC ABL56199;
 XX 05-JUL-2002 (first entry)

XX Human P2Y1-1i PCR primer 1.
 XX Human; P2Y1-1i; G protein-coupled; receptor; gene therapy; thyroid; PCR;
 XX primer; ss.

XX Homo sapiens.
 XX DE10046970-AL.
 XX 11-APR-2002.

XX 22-SEP-2000; 2000DE-01046970.
 XX 22-SEP-2000; 2000DE-01046970.

XX (BRUE/) BRUESS M.
 XX (BOEN/) BOENISCH H.
 XX Bruess M, Boenisch H;
 XX WPI; 2002-353329/39.

XX New human P2Y1li gene, useful for treatment and diagnosis of associated
 PT diseases, and related proteins, antibodies and modulators, encodes G
 PT protein-coupled receptor.

XX Disclosure; Page 2; 5pp; German.

XX The invention relates to the human P2Y1li gene (I), including its 5' and
 CC 3' untranslated regions, located on chromosome 13 and encoding a G
 CC protein-coupled receptor. (I) and related mRNA, cDNA, protein, antibodies
 CC etc., are used for diagnosis and (gene) therapy of diseases that are
 CC (in)directly associated with (I) or its expression products. No diseases
 CC are specified but as (I) is expressed only in thyroid tissue, (I) is
 CC presumed to be involved in regulation of thyroid function. The present
 CC sequence is that of a PCR primer for amplification of the P2Y1li gene

XX Sequence 20 BP; 9 A; 3 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 642 CATGCTGTCTCTCTTCAT 660
 ||||| ||||| ||||| |||||

Db 20 CATGCTGTCTCTCTTCAT 2
 RESULT 735
 ABL54171
 ID ABL54171 standard; DNA; 20 BP.
 XX AC ABL54171;
 XX 12-JUL-2002 (first entry)
 XX Oligonucleotide.
 XX B cell lymphoma/leukaemia-2; bcl-2; oncogene; antisense; lymphoma;
 KW leukaemia; colon carcinoma; rectal carcinoma; pancreatic cancer;
 KW breast cancer; ovarian cancer; prostate cancer; renal cell carcinoma;
 KW hepatoma; bile duct carcinoma; choriocarcinoma; cervical cancer;
 KW testicular cancer; lung carcinoma; bladder carcinoma; melanoma;
 KW head and neck cancer; brain cancer; cytostatic; human; gene therapy; ss.
 XX Homo sapiens.
 XX WO200217852-A2.
 XX 07-MAR-2002.
 XX 23-AUG-2001; 2001WO-US026414.
 XX 25-AUG-2000; 2000US-0227970P.
 XX 29-SEP-2000; 2000US-0237009P.
 XX 10-NOV-2000; 2000US-00709170.
 XX (GENT-) GENTA INC.
 XX Warrel RP, Klem RE, Fingert H;
 XX WPI; 2002-371796/40.
 XX Treating or preventing cancer, tumors and carcinomas, comprises
 PT administering B cell lymphoma/leukemia-2 antisense oligonucleotide at
 PT high doses for short period for time with one or more cancer
 PT therapeutics.

Disclosure; Page 63; 64pp; English.

XX The present invention is related to the use of a B cell
 CC lymphoma/leukaemia-2 (bcl-2) antisense oligonucleotide, particularly
 CC G3139 (see ABL54148), to treat and prevent bcl-2 related disorders.
 CC Administration at high doses results in significant therapeutic
 CC responses, including low toxicity, high tolerance and prolonged survival.
 CC Administration at high doses for short periods of time (less than 14
 CC days) also provides significant therapeutic responses in the treatment of
 CC cancer. The bcl-2 antisense oligomer may also be used to increase the
 CC sensitivity of a subject to cancer therapeutics, and in combination with
 CC hormone treatment or gene therapy. Conditions that may be treated or
 CC prevented include cancer of the haematopoietic system, skin, bone and
 CC soft tissue, reproductive system, genitourinary system, breast, endocrine
 CC system, brain, central nervous system, peripheral nervous system, kidney,
 CC lung, respiratory system, thorax, gastrointestinal and alimentary canal,
 CC lymph nodes, pancreas, hepatobiliary system, or cancer of unknown primary
 CC site, non-Hodgkin's lymphoma, Hodgkin's lymphoma, leukaemia, colon
 CC carcinoma, rectal carcinoma, pancreatic, breast, ovarian, prostate,
 CC cervical, testicular, head and neck or brain cancer, renal cell
 CC carcinoma, hepatoma, bile duct carcinoma, choriocarcinoma, lung
 CC carcinoma, bladder carcinoma and melanoma (all claimed). Note: The
 CC present sequence is given in the Sequence Listing from the present
 CC invention but the Seq ID No. is not referred to within the specification

XX Sequence 20 BP; 1 A; 6 C; 13 G; 0 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 6 GAGCGGGGGGGGAGGGC 24
 ID 1 GCGGGGGGGGGGGGGC 19
 RESULT 736
 ABS64405/c
 ID ABS64405 standard; DNA; 20 BP.
 AC ABS64405;
 XX
 DT 15-NOV-2002 (first entry)
 XX
 DE Human NOVX forward PCR primer Ag2420.
 XX
 KW Human; NOVX; neurodegenerative disease; Alzheimer's disease; anxiety;
 KW Parkinson's disease; Huntington's disease; neurological disorder;
 KW schizophrenia; manic depression; mental retardation; angina pectoris;
 KW cardiovascular disease; acute heart failure; myocardial infarction;
 KW muscular disease; muscular disorder; retinal disease; photoreception;
 KW deafness; keratinisation disorder; cancer; ovarian cancer; melanoma;
 KW immunological disorder; inflammatory disease; immune disease; diabetes;
 KW bacterial infection; fungal infection; protozoal infection; obesity;
 KW viral infection; reproductive system disorder; metabolic disturbance;
 KW anorexia; wasting disorder; chronic disease; infectious disease;
 KW dyslipidaemia; PCR; primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200264791-A2.
 XX
 PD 22-AUG-2002.
 XX
 PF 10-DEC-2001; 2001WO-US048369.
 XX
 PR 08-DEC-2000; 2000US-0254329P.
 PR 14-DEC-2000; 2000US-0255648P.
 PR 15-MAY-2001; 2001US-0291037P.
 PR 08-JUN-2001; 2001US-0297173P.
 PR 08-JUN-2001; 2001US-0309258P.
 PR 29-AUG-2001; 2001US-0315639P.
 PR 01-OCT-2001; 2001US-0326393P.
 XX
 PA (CURA-) CURAGEN CORP.
 XX
 PI Alsbrook JP, Anderson DW, Burgess CE, Boldog FL, Casman SJ;
 PI Colman SD, Edinger SK, Ellerman K, Gerlach V, Gorman L, Grosse WM;
 PI Guo X, Herrmann JL, Kekuda R, Lepley DM, Li L, Macdougall JR;
 PI Millet I, Pena CEA, Peyman JA, Rastelli L, Rieger DK, Shimkets RA;
 PI Smithson G, Spytek KA, Stone DJ, Tchernev VT, Vernet CAM, Voss EZ;
 PI Zerhusen BD, Zhong H, Zhong M;
 XX
 DR WPI; 2002-643486/69.
 XX
 PT New NOVX polypeptides and polynucleotides useful for treating or
 PT preventing e.g. neurodegenerative diseases, neurological disorders,
 PT cardiovascular diseases, muscular diseases and disorders, or
 PT immunological diseases.
 XX
 PS Example 2; Page 216; 299pp; English.
 XX
 CC The present invention relates to new NOVX polypeptides. The polypeptides,
 CC polynucleotides and antibodies are useful in the manufacture of a
 CC medicament for treating or preventing neurodegenerative diseases (e.g.
 CC Alzheimer's disease, Parkinson's disease, or Huntington's disease),
 CC neurological disorders (e.g. anxiety, schizophrenia, manic depression or
 CC mental retardation), cardiovascular disease (e.g. acute heart failure,
 CC angina pectoris or myocardial infarction), muscular diseases and
 CC disorders, retinal diseases (including those involving photoreception,
 CC deafness and keratinisation disorders), cancer (e.g. ovarian cancer or
 CC melanoma), immunological disorders, inflammatory and immune diseases,
 CC bacterial, fungal, protozoal and viral infections, and reproductive

CC system disorders. The proteins of the invention may be used to screen
 CC drugs or compounds that modulate the NOVX protein activity or expression,
 CC as well as to treat disorders characterised by insufficient or excessive
 CC production of NOVX protein or protein forms that have decreased or
 CC aberrant activity compared to NOVX wild type protein, such as diabetes,
 CC obesity, metabolic disturbances associated with obesity, anorexia and
 CC wasting disorders associated with chronic diseases and various cancers,
 CC infectious diseases and various dyslipidaemias. The nucleic acid
 CC sequences of the invention may be used in chromosome mapping, identifying
 CC an individual from minute biological samples (tissue typing), and in
 CC forensic identification of a biological sample. The present nucleic acid
 CC sequence represents a PCR primer that was used in the methods of the
 CC invention for amplification of NOVX genes
 XX
 SQ Sequence 20 BP; 4 A; 5 C; 5 G; 6 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 814 ATGTTCCAGCCTAGTCGG 832
 DB 19 AAGTTCAGCCCAAGTGCAG 1
 RESULT 737
 ABZ89497
 ID ABZ89497 standard; DNA; 20 BP.
 XX
 AC ABZ89497;
 XX
 DT 17-OCT-2003 (first entry)
 XX
 DE Human oligonucleotide sequence.
 XX
 KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX
 OS Homo sapiens.
 XX
 PN WO200285308-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013135.
 XX
 PR 24-APR-2001; 2001US-0286137P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-229219/22.
 XX
 PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.
 XX
 PS Disclosure; SEQ ID NO 4739; 872pp; English.
 XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention

xx CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' and genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention

AA CC The invention relates to a novel pharmaceutical composition, which has
CC CC first active agent comprising an oligonucleotide antisense to the
CC CC initiation codon, coding region, 5' or 3' and genomic flanking regions,
CC CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC CC junctions of genes encoding a polypeptide associated with lung and/or
CC CC nasal airway dysfunction and a second active agent comprising an
CC CC anti-inflammatory steroid and ubiquinone. A composition of the invention

has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO at [ftp.wipo.int/pub/published_pct_sequences](http://wipo.int/pub/published_pct_sequences)

has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO at www.wipo.int/pub/published pct sequences

CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. CC Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO CC at ftp.wipo.int/pub/published_pct_sequences

XX

XX SQ Sequence 20 BP; 11 A; 0 C; 1 G; 8 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0

Qy 1599 TATTATATATAAAATTAT 1617
||| ||||| ||||| |||

Db 2 TATATATATGAAATATAT 20

RESULT 740
ABZ88600

ID ABZ88600 standard; DNA; 20 BP.

XX AC ABZ88600;

XX 17-OCT-2003 (first entry)

XX Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
antisense gene therapy; respiratory; lung; adenosine sensitivity;
adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
lung inflammation; respiratory disease; ds.

OS Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
Miller S, Tang L, Shahabuddin S;
WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or ubiquinone.

XX Disclosure; SEQ ID NO 3842; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention

CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 5 A; 3 C; 1 G; 11 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1883 TTTTTCAGCCTCTAAA 1901
 ||||| |||||
 Db 2 TTTTTCAGTTCCTAAA 20

RESULT 742
 ABZ85317
 ID ABZ85317 standard; DNA; 20 BP.

AC ABZ85317;
 XX
 DT 17-OCT-2003 (first entry)
 XX
 DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Claim 15; SEQ ID NO 559; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention

CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX

SQ Sequence 20 BP; 11 A; 1 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1609 AAAATTATTAAATATAAA 1627
 ||||| ||||| |||||
 Db 1 AAAGTTTATTCATACAAA 19

RESULT 743
 ABZ92514/C
 ID ABZ92514 standard; DNA; 20 BP.

AC ABZ92514;

XX 17-OCT-2003 (first entry)

XX Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX WO200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.

XX Disclosure; SEQ ID NO 7756; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention


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RESULT 748
ABQ84126
ID ABQ84126 standard; DNA; 20 BP.
XX
AC ABQ84126;
XX
DT 27-OCT-2003 (revised)
DT 18-FEB-2003 (first entry)
XX
DE HIV-1 amplification and detection third PCR primer SEQ ID NO:29.
XX
KW HIV-1; amplification; detection; PCR primer; ss.
XX
OS Human immunodeficiency virus 1.
XX
PN EP1253206-A2.
XX
PD 30-OCT-2002.
XX
PF 26-APR-2002; 2002EP-00009618.
XX
PR 26-APR-2001; 2001JP-00129210.
XX
PA (TOYU ) TOSOH CORP.
XX
PI Ishizuka T, Yasukawa K, Ishiguro T;
XX
WPI; 2003-077620/08.
XX
PD 30-OCT-2002.
XX
PF 26-APR-2002; 2002EP-00009618.
XX
PR 26-APR-2001; 2001JP-00129210.
XX
PA (TOYU ) TOSOH CORP.
XX
PI Ishizuka T, Yasukawa K, Ishiguro T;
XX
WPI; 2003-077620/08.
XX
Amplifying RNA of human immunodeficiency virus-1, by synthesizing cDNA by
PT polymerase, denuding cDNA to single-stranded DNA, forming and
PT transcribing the double-stranded DNA into RNA transcript, and
PT synthesizing cDNA.
XX
PS Claim 6; Page 17; 24pp; English.
XX
CC The present invention describes a method (M1) for amplifying human
CC immunodeficiency virus (HIV)-1 RNA, comprising synthesizing a cDNA by RNA
CC -dependent DNA polymerase using a primer, denuding cDNA to a single-
CC stranded DNA by degrading the RNA in the resulting RNA-DNA double strand,
CC forming a double-stranded DNA having a promoter sequence transcribed into
CC RNA, transcribing a strand of double-stranded DNA into an RNA transcript,
CC and synthesizing a cDNA. Also described is a method (M2) for detecting
CC HIV-1. M1 is useful for amplifying RNA of HIV-1, and M2 is useful for
CC detecting HIV-1. Oligonucleotides (ABQ84098 to ABQ84132) from the present
CC invention can be used for the amplification and detection of HIV-1 RNA in
CC a sample. (Updated on 27-OCT-2003 to standardise OS field)
XX
SQ Sequence 20 BP; 2 A; 5 C; 0 G; 13 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 1576 TTTATATTTCTATTCTC 1594
Db 1 TTTATATTTCTATTCTC 19
XX
RESULT 749
ABQ84127
ID ABQ84127 standard; DNA; 20 BP.
XX
AC ABQ84127;
XX
DT 27-OCT-2003 (revised)
DT 18-FEB-2003 (first entry)
XX
DE HIV-1 amplification and detection third PCR primer SEQ ID NO:30.
XX
KW HIV-1; amplification; detection; PCR primer; ss.
XX

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OS Human immunodeficiency virus 1.
XX
PN EP1253206-A2.
XX
PD 30-OCT-2002.
XX
PF 26-APR-2002; 2002EP-00009618.
XX
PR 26-APR-2001; 2001JP-00129210.
XX
PA (TOYU ) TOSOH CORP.
XX
PI Ishizuka T, Yasukawa K, Ishiguro T;
XX
WPI; 2003-077620/08.
XX
Amplifying RNA of human immunodeficiency virus-1, by synthesizing cDNA by
PT polymerase, denuding cDNA to single-stranded DNA, forming and
PT transcribing the double-stranded DNA into RNA transcript, and
PT synthesizing cDNA.
XX
PS Claim 6; Page 17; 24pp; English.
XX
CC The present invention describes a method (M1) for amplifying human
CC immunodeficiency virus (HIV)-1 RNA, comprising synthesizing a cDNA by RNA
CC -dependent DNA polymerase using a primer, denuding cDNA to a single-
CC stranded DNA by degrading the RNA in the resulting RNA-DNA double strand,
CC forming a double-stranded DNA having a promoter sequence transcribed into
CC RNA, transcribing a strand of double-stranded DNA into an RNA transcript,
CC and synthesizing a cDNA. Also described is a method (M2) for detecting
CC HIV-1. M1 is useful for amplifying RNA of HIV-1, and M2 is useful for
CC detecting HIV-1. Oligonucleotides (ABQ84098 to ABQ84132) from the present
CC invention can be used for the amplification and detection of HIV-1 RNA in
CC a sample. (Updated on 27-OCT-2003 to standardise OS field)
XX
SQ Sequence 20 BP; 4 A; 3 C; 0 G; 13 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
QY 1574 ATTTATATTTCTATTCTC 1592
Db 1 AATTTATATTTCTTTCTTC 19
XX
RESULT 750
ABZ59603/C
ID ABZ59603 standard; DNA; 20 BP.
XX
AC ABZ59603;
XX
DT 22-APR-2003 (first entry)
XX
DE Human parvovirus B19 probe VSPPR1 SEQ ID NO:61.
XX
KW Human parvovirus B19; parvovirus B19; infection; virus; blood; plasma;
KW PCR primer; ss.
XX
OS B19 virus.
OS Synthetic.
XX
WO2003002753-A2.
XX
PD 09-JAN-2003.
XX
PF 28-JUN-2002; 2002WO-US020684.
XX
PR 28-JUN-2001; 2001US-0302077P.
PR 19-MAR-2002; 2002US-0365956P.
PR 29-MAR-2002; 2002US-0369224P.
XX
PA (CHIR ) CHIRON CORP.

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XX Pichuantes S, Shyamala V;
XX WPI; 2003-201510/19.
XX
XX Detecting a human parvovirus B19 infection in a biological sample to
XX prevent viral transmission, comprises reacting a parvovirus B19 nucleic
XX acid with a primer complementary to the 3'-terminal portion of the RNA
XX target sequence.
XX
XX Example 5; Page 53; 148pp; English.
XX
XX The present invention describes a method for detecting a human parvovirus
XX B19 infection in a biological sample. The method comprises reacting the
XX isolated parvovirus B19 nucleic acid with a first oligonucleotide
XX consisting of a first primer containing a complexing sequence
XX sufficiently complementary to the 3'-terminal portion of the RNA target
XX sequence to complex with. Also described: (1) amplifying a target
XX parvovirus B19 nucleotide sequence; (2) a polynucleotide comprising one
XX of 47 700 base pair sequences (see ABZ59549 to ABZ59569, and ABZ59604 to
XX ABZ59629); (3) a polynucleotide comprising either of 2 4678 base pair
XX sequences (see ABZ59570 and ABZ59571); (4) an oligonucleotide primer
XX consisting of a promoter region recognised by a DNA-dependent RNA
XX polymerase operably linked to a human parvovirus B19-specific complexing
XX sequence of 10-75 nucleotides; (5) an oligonucleotide probe comprising a
XX parvovirus B19-specific hybridising sequence of 10-50 nucleotides linked
XX to an acridinium ester label; and (6) a diagnostic test kit comprising an
XX oligonucleotide primer of (4), and instructions for conducting the
XX diagnostic test. The method is useful for detecting parvovirus infection
XX in a biological sample, such as in blood products, to prevent
XX transmission of the virus through blood and plasma derivatives or by
XX close personal contact. ABZ59549 to ABZ59634 and ABP57262 to ABP57267
XX represent sequences used in the exemplification of the present invention
XX
SQ Sequence 20 BP; 6 A; 3 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Oy 1620 AATATAAATATCCACGGG 1638
Db ||||| ||||| ||||| |||||
20 AATCTAAATATCTCCATGG 2

RESULT 751
ADA74704/c
ID ADA74704 standard; DNA; 20 BP.
XX
XX ADA74704;

XX 20-NOV-2003 (first entry)
XX
XX GTT3623 antisense oligonucleotide targeted to human neuropilin mRNA.
XX
XX neuropilin; VEGF165R; vascular endothelial growth factor receptor;
XX cytosolic; growth; tumour metastasis; angiogenesis; gene therapy;
XX GTT3623; antisense; human; ss.
XX
XX Homo sapiens.

XX US2003083274-A1.

XX 01-MAY-2003.

XX 22-APR-1999; 99US-00296264.

XX 23-APR-1998; 98US-0082791P.

XX (WEIG/) WEIGHT J A.

XX (YOUN/) YOUNG A H.

XX (LBEY/) LEE Y S.

PI Wright JA, Young AH, Lee YS;
XX
XX WPI; 2003-576622/54.
XX

XX New antisense oligonucleotide that inhibits neuropilin expression, useful
XX for inhibiting growth of mammalian tumor or inhibiting metastasis of a
XX mammalian tumor.

XX Claim 1; Page 5; 27pp; English.

XX The invention relates to a novel antisense oligonucleotide that inhibits
XX the expression of neuropilin, also known as VEGF165R (vascular
XX endothelial growth factor receptor). The oligonucleotide of the invention
XX demonstrates cytostatic activity and may be useful for inhibiting the
XX growth or metastasis of a mammalian tumor and to inhibit angiogenesis in
XX mammals. Furthermore, the oligonucleotide may be utilised during gene
XX therapy. The current sequence is that of the GTT3623 antisense
XX oligonucleotide of the invention which is targeted to human neuropilin
XX mRNA.

XX Sequence 20 BP; 3 A; 2 C; 8 G; 7 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Oy 1560 CCCCAACCCCTCAGATTTT 1578
Db | | | | | | | | | | | | | | | | | |
19 CACCAACCCACAGATGTT 1

RESULT 752
AAL61793/c
ID AAL61793 standard; DNA; 20 BP.
XX
XX AAL61793;

XX 22-SEP-2003 (first entry)

XX Human ETBR-LP-2 antisense oligonucleotide ISIS #204219.

XX Human; G protein-coupled receptor; hyperproliferative disorder; GPR37L1;
XX endothelin type b receptor-like protein-2; cerebral vascular disease;
XX antisense; endothelin-binding receptor-like protein-2; atherosclerosis;
XX cardiovascular disease; ETBR-LP-2; G-protein coupled receptor 37 like 1;
XX acute proliferative nephropathy; ETBR-like protein 2; cancer; stroke;
XX angiogenesis; hypertension; phosphorothioate; ss.

XX Homo sapiens.
XX Synthetic.

XX Key Location/Qualifiers

XX modified_base 1..20

XX /tag= a

XX /mod_base= OTHER

XX /note= "Phosphorothioate backbone; All cytidine residues

XX are 5-methylcytidines"

XX modified_base 1..5

XX /tag= b

XX /mod_base= OTHER

XX /note= "2'-methoxyethyl (2'-MOE) nucleotides"

XX 16..20

XX /tag= c

XX /mod_base= OTHER

XX /note= "2'-methoxyethyl (2'-MOE) nucleotides"

XX WO2003050244-A2.

XX 19-JUN-2003.

XX 04-DEC-2002; 2002WO-US038520.

XX 06-DEC-2001; 2001US-00003126.

XX PR 18-DEC-2001; 2001US-00024396.
 XX PA (ISIS-) ISIS PHARM INC.
 XX PI Dobie KW;
 XX DR WPI; 2003-533006/50.
 XX PT New compound, having a sequence targeted to a nucleic acid encoding
 PT CD36L1, useful for preparing a composition for treating
 PT hyperproliferative or autoimmune disorders.
 XX PS Example 15; Page 82; 122pp; English.
 XX CC The invention relates to antisense compounds, compositions and methods
 CC for modulating the expression of class B scavenger receptor, CD36 antigen
 CC -like 1 (CD36L1). CD36L1 is also known as scavenger receptor class B type
 CC 1 (SRB1), CLA-1 and mouse homologue, SR-BI. The antisense compound is
 CC useful for preparing a composition for treating metabolic or
 CC cardiovascular disorder, e.g. altered lipid metabolism or
 CC atherosclerosis. It is also used in gene therapy. The present sequence is
 CC an antisense oligonucleotide targeted to human CD36L1 DNA. This sequence
 CC is used to illustrate the method of the invention
 XX
 SQ Sequence 20 BP; 4 A; 6 C; 3 G; 7 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1037 CTAATGAGCTTCCATACAA 1055
 DB 2 CTAATGAGCTTCCCTGCTA 20
 RESULT 755
 ACH66609
 ID ACH66609 standard; DNA; 20 BP.
 XX AC ACH66609;
 XX DT 16-OCT-2003 (first entry)
 XX DE Antisense PCR primer used to amplify SLC29A1.
 XX KW PCR, primer; ss; genomic DNA; gDNA; untranslated region; UTR;
 KW DNA high-density microarray; biosite; large scale production; gDNA probe;
 KW microarray; Type II primer.
 XX OS Homo sapiens.
 XX PN US2003073085-A1.
 XX PD 17-APR-2003.
 XX PF 05-OCT-2001; 2001US-00972469.
 XX PR 05-OCT-2001; 2001US-00972469.
 XX PA (LAIF/) LAI F.
 XX PA (ZHOU/) ZHOU D.
 XX PI Lai F, Zhou D;
 XX DR WPI; 2003-555942/52.
 XX PT Amplifying expressed genetic sequences from genomic DNA of mammalian or
 PT higher order plant species for printing on DNA microarrays, involves
 PT using the 3' untranslated region of the gene sequence.
 XX PS Disclosure; Page 8; 15pp; English.

CC The invention discloses a method for amplifying expressed genetic
 CC sequences from genomic DNA (gDNA) from mammalian or higher order plant
 CC species. The method involves identifying a 3' untranslated region (UTR)
 CC of a gDNA sequence, designing probe, performing PCR, separating the
 CC product by size differentiation and performing a second PCR to amplify
 CC the predetermined sequence. Also claimed is a biological analysis device,
 CC comprising a substrate and an array of a set of expressed genetic
 CC sequences, located on the substrate, which are generated by the method
 CC above and a DNA high-density microarray comprising a substrate upon which
 CC are deposited an array of biosites of genomic DNA fragments having the
 CC sequence of at least one exon, and absent polyadenine and vector
 CC sequences, where the genomic DNA fragments have a sequence length of from
 CC about 75-2000 nucleotides. The method is efficient for amplifying gene
 CC sequences, enables large-scale production of gDNA sequences, generates
 CC large quantities of gDNA probes, which enables greater efficiency for
 CC printing in microarray formats, fabricates high-density DNA arrays of
 CC enhanced, widely varying genetic content and abstains from using RNA-
 CC derived sequences by simple PCR amplifications without cloning. The
 CC method produces amplified sequences that have greater specificity and
 CC size consistency than that observed with cDNA fragments, and allows for
 CC greater signal sensitivity than oligonucleotides. The sequence presented
 CC is a Type II gene specific primer
 XX
 SQ Sequence 20 BP; 4 A; 5 C; 5 G; 6 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 500 AGGCATCTGCTCTCTGTTA 518
 DB 2 AGGCACCTGGTCTCTGTCA 20
 RESULT 756
 ADC84389/C
 ID ADC84389 standard; DNA; 20 BP.
 XX AC ADC84389;
 XX DT 01-JAN-2004 (first entry)
 XX DE Human papillomavirus type 42 (HPV 42) detection oligonucleotide #2.
 XX KW probe; human papilloma virus; HPV; detection; identification; ss.
 XX OS Human papillomavirus type 42.
 XX PN EPI302550-A1.
 XX PD 16-APR-2003.
 XX PF 10-OCT-2001; 2001EP-00123379.
 XX PR 10-OCT-2001; 2001EP-00123379.
 XX PA (KING-) KING CAR FOOD IND CO LTD.
 XX PI Lin C, Lin R, You C, Huang H, Lee B, Lee H, Lin Y, Fan C;
 XX PI Hsu H, Shih C, Yeh C, Kao Y, Pan C, Chan P;
 XX DR WPI; 2003-432398/41.
 XX PT Detector for identifying human papilloma virus subtypes, comprises
 PT carrier having two parts carrying first and second oligonucleotides that
 PT respectively hybridize with DNA contained in first and second subtypes of
 PT the virus.
 XX Claim 4; SEQ ID NO 619; 221pp; English.
 XX The invention comprises oligonucleotides for detecting and identifying
 CC subtypes of human papilloma virus (HPV) contained in a sample. The
 CC oligonucleotides of the invention are useful for simultaneously detecting

CC and identifying subtypes of HPVs. The present DNA sequence represents an
CC HPV detection oligonucleotide of the invention.
XX
SQ Sequence 20 BP; 6 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 559 TATCACCAGAGGTGCTGT 577
Db 20 TATCACCAGAGTTGCAGT 2
RESULT 757
AAD61248/C
ID AAD61248 standard; DNA; 20 BP.
XX
AC AAD61248;
XX
DT 15-JAN-2004 (first entry)
XX
DE Human Ship-1 antisense oligonucleotide ISIS #168334.
XX
KW Human; Ship-1; SH2-containing phosphatidylinositol phosphatase-1; INPP5D;
KW insensitivity to apoptotic signal; developmental disorder; inflammation;
KW immunosuppressive; autoimmune disorder; antisense therapy; antisense;
KW phosphorothioate backbone; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20 /*tag= a
FT /*mod_base= OTHER
FT /*note= "Phosphorothioate backbone; All cytidines are 5-
FT methyl cytidines"
FT modified_base 1..5
FT /*tag= b
FT /*mod_base= OTHER
FT /*note= "2'-O-methoxyethyl (2'-MOE) nucleotides"
FT modified_base 16..20
FT /*tag= c
FT /*mod_base= OTHER
FT /*note= "2'-O-methoxyethyl (2'-MOE) nucleotides"
XX
PN US2003114401-A1.
XX
PD 19-JUN-2003.
XX
PF 06-DEC-2001; 2001US-00003919.
XX
PR 06-DEC-2001; 2001US-00003919.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Bennett CF, Freier SM;
XX
XX WPI; 2003-801302/75.
DR Antisense compounds targeted to nucleic acid molecule encoding Ship-1,
PT useful for treating diseases associated with expression of Ship-1, such
PT as autoimmune and developmental disorders.
XX
PS Example 15; Page 25; Opp; English.
XX
CC The present invention provides antisense compounds targetted to nucleic
CC acid molecule encoding Ship-1 (also known as SH2-containing
CC phosphatidylinositol phosphatase-1 and INPP5D) to modulate/inhibit the
CC expression of Ship-1. The invention is useful in treatment of diseases
CC such as insensitivity to apoptotic signals, autoimmune disorders,
CC developmental disorders and inflammatory disorders. The present sequence

CC is human Ship-1 antisense oligonucleotide
XX
SQ Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;
Query Match 0.7%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 8.7e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1789 ACTCCTGAATGCCAAGTG 1807
Db 19 ACTCATGATGTGCCAAGTG 1
RESULT 758
ADE77572
ID ADE77572 standard; DNA; 20 BP.
XX
AC ADE77572;
XX
DT 29-JAN-2004 (first entry)
XX
DE DRB1*10011 probe designed to analyse the HLA-DRB polymorphic region.
XX
KW HLA-DRB; probe; ss; human; multiplexed elongation assay;
KW enzymatic recognition;
KW cystic fibrosis conductance transmembrane regulator; CFTR;
KW human leukocyte antigen; HLA; genetic testing; carrier screening;
KW genotyping; profiling; polymorphic.
XX
OS Homo sapiens.
XX
PN WO2003034029-A2.
XX
PD 24-APR-2003.
XX
PF 15-OCT-2002; 2002WO-US033012.
XX
PR 15-OCT-2001; 2001US-0329427P.
PR 15-OCT-2001; 2001US-0329428P.
PR 15-OCT-2001; 2001US-0329619P.
PR 15-OCT-2001; 2001US-0329620P.
PR 14-MAR-2002; 2002US-0364416P.
XX
PA (BIOA-) BIOARRAY SOLUTIONS LTD.
XX
PI Li AX, Hashmi G, Seul M;
XX
DR WPI; 2003-393553/37.
XX
PT Concurrent interrogation of a number of polymorphic sites, useful for
PT genetic testing, carrier screening, genetic profiling, and identity
PT testing, comprises conducting a multiplexed elongation assay using
PT probes.
XX
PS Example 2; Page 38; 143pp; English.
XX
CC This invention relates to a novel method for the concurrent interrogation
CC of a number of polymorphic sites in the presence of, and without
CC interference from, non-designated polymorphic sites. Specifically, it
CC comprises conducting a multiplexed elongation assay by applying one or
CC more temperature cycles to achieve linear amplification of the target or
CC a combination of annealing and elongation steps under temperature-
CC controlled conditions. Furthermore, this detection method uses probe
CC extension or elongation and relies on enzymatic recognition, a superior
CC technique that no longer depends on differential hybridisation. The
CC present invention describes probes and methods useful for identifying or
CC detecting polymorphisms at one or more designated sites, such that they
CC can identify mutations within the cystic fibrosis conductance
CC transmembrane regulator (CFTR) or the human leukocyte antigen (HLA)
CC genes. In addition, concurrent interrogation of a multiplicity of
CC polymorphic sites is useful for genetic testing, carrier screening,
CC genotyping or genetic profiling, and identity testing. This
CC oligonucleotide is a probe designed to analyse the polymorphic region of

CC the HLA-DRB gene of the invention.
 XX
 SQ Sequence 20 BP; 4 A; 1 C; 7 G; 8 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1487 TCAAGGAGGAGGTCACGTT 1505
 ||| ||||| ||||| |||||
 Db 2 TCTGGAGGAGGTTAAGTT 20
 RESULT 759
 ADE27916/c
 ID ADE27916 standard; DNA; 20 BP.
 XX
 AC ADE27916;
 XX
 DT 29-JAN-2004 (first entry)
 XX
 DE Human B7-2 targeted oligonucleotide SEQ ID 157.
 XX
 KW ss; human; B7-2; inflammatory skin disorder; antisense; psoriasis;
 KW contact dermatitis; atopic dermatitis; seborrheic dermatitis;
 KW nummular dermatitis; generalised exfoliative dermatitis; eczema;
 KW critical costimulatory molecule.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN US2003176374-A1.
 XX
 PD 18-SEP-2003.
 XX
 PF 09-MAY-2001; 2001US-00851871.
 XX
 PR 31-DEC-1996; 96US-00777266.
 PR 04-JUN-1999; 99US-00326186.
 PR 25-MAY-2000; 2000WO-US014471.
 XX
 PA (BENN/) BENNETT C F.
 PA (VICK/) VICKERS T A.
 PA (KARR/) KARRAS J G.
 XX
 PI Bennett CF, Vickers TA, Karras JG;
 XX
 DR WPI; 2003-863863/80.
 XX
 PT Treating an inflammatory skin disorder such as psoriasis comprises
 PT topically applying an antisense compound targeted to the nucleic acid
 PT encoding human B7 protein.
 XX
 PS Example 14; SEQ ID NO 178; 88pp; English.
 XX
 CC The invention relates to a method of treating an inflammatory skin
 CC disorder in an individual by topically applying an antisense compound
 CC targeted to a nucleic acid molecule encoding a human B7 protein. The
 CC invention is for treating an inflammatory skin disorder in individual.
 CC The skin disorder is psoriasis, contact dermatitis, atopic dermatitis,
 CC seborrheic dermatitis, nummular dermatitis, generalised exfoliative
 CC dermatitis or eczema. The invention effectively modulates critical
 CC costimulatory molecules such as the B7 protein. The present sequence
 CC represents a human B7-2 targeted oligonucleotide.
 XX
 SQ Sequence 20 BP; 7 A; 5 C; 7 G; 1 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.2; DB 1; Length 20;
 Best Local Similarity 84.2%; Pred. No. 8.7e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1277 TCTCGATCTGCTCTCTGA 1295
 ||| | ||||| ||||| |||||

Db 19 TCTGCTGCTGCTCTCTGA 1
 RESULT 760
 AAQ31278
 ID AAQ31278 standard; DNA; 21 BP.
 XX
 AC AAQ31278;
 XX
 DT 25-MAR-2003 (revised)
 DT 25-MAR-1993 (first entry)
 XX
 DE CTXA1/1Q analogue oligonucleotide (His70 -> Tyr).
 XX
 KW Cholera toxin; A1; A2; B; subunit; mutation; ss.
 XX
 OS Synthetic.
 XX
 PN WO9219265-A1.
 XX
 PD 12-NOV-1992.
 XX
 PF 04-MAY-1992; 92WO-US003703.
 XX
 PR 02-MAY-1991; 91US-00694733.
 XX
 PA (AMGE-) AMGEN.
 PA (UYSC-) UNIV SOUTHERN CALIFORNIA.
 XX
 PI Burnette WN, Kaslow HR;
 XX
 DR WPI; 1992-398532/48.
 XX
 PT Recombinant DNA encoding analogue of Vibrio cholerae catalytic sub-unit -
 PT useful as a vaccine for preventing cholera, has little or no catalytic
 PT activity.
 XX
 PS Disclosure; Page 39/1; 74pp; English.
 XX
 CC The oligonucleotide is used in the construction of a cholera toxin (CT)
 CC analogue. A recombinant mol. encoding an analogue of the catalytic
 CC subunit of CT, where the analogue has reduced or no catalytic activity
 CC associated with CT reactivity is an analogue of the A region, esp. A1
 CC region, comprising a site-specific mutation in the region bounded by the
 CC codons for Met1 and Arg192 or Ser194, esp. one or more of Arg7, Arg11,
 CC Asp9, His44, His70 and Glu112 (see tag h-m of Features Table). The
 CC analogue may also comprise a truncation of the C-terminal portion
 CC starting at Trp179 (see tag n of Features Table). See AAQ31263 for mutant
 CC subunit A of CT. The DNA may also encode subunit B of CT, esp. the B
 CC oligomer in native form or which has been genetically engineered (see
 CC AAQ31264). (Updated on 25-MAR-2003 to correct PN field.)
 XX
 SQ Sequence 21 BP; 5 A; 3 C; 7 G; 6 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 9.4e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1803 AAGTCCCTGCTTAGTACT 1821
 ||||| ||||| ||||| |||||
 Db 3 AAGTCCCTACTTAGTGGT 21
 RESULT 761
 AAQ48353/c
 ID AAQ48353 standard; DNA; 21 BP.
 XX
 AC AAQ48353;
 XX
 DT 25-MAR-2003 (revised)
 DT 03-MAR-1994 (first entry)
 XX
 DE MAB 25D2 heavy chain cloning primer 2232.

XX Heavy; VH; light; VL; chain; variable region; anti-human; interleukin-4;
 KW IL-4; monoclonal antibody; MAb; 25D2; single chain binding protein;
 KW complementarity determining region; CDR; humanised; Fv region; BABS;
 KW antagonist; polymerase chain reaction; PCR; primer; amplify; gamma4;
 KW PSV.SPORT; ss.
 XX
 OS Synthetic.
 XX
 XX WO9317106-A1.
 PN
 XX 02-SEP-1993.
 PD
 XX 18-FEB-1993; 93WO-US001301.
 PF
 XX 19-FEB-1992; 92US-00841659.
 PR
 XX (SCHE) SCHERING CORP.
 PA
 XX
 XX Abrams JS, Dalie B, Le HV, Miller K, Murgolo NJ, Nguyen H;
 PI Pearce M, Tindall S, Zavodny PJ;
 PI
 XX WPI; 1993-288412/36.
 DR
 XX Monoclonal antibodies against human interleukin-4 corresp. DNA and CDRs -
 PT are useful for detection of interleukin-4 and treatment of related
 PT diseases.
 PT
 XX
 XX Example 9; Page 91; 114pp; English.
 PS
 XX The sequences given in AAQ48351-60 are primers which were used to clone
 CC the humanised heavy (H) chain of the anti-human interleukin-4 (IL-4)
 CC monoclonal antibody (MAb) 25D2 in three fragments. The amplified
 CC fragments were designed to contain silent restriction sites, however
 CC several codons had to be changed to incorporate further restriction
 CC sites. The primers given in AAQ48361-66 were used to amplify the entire H
 CC chain variable region (VH) of an unrelated humanised antibody. The
 CC amplified fragments were then cloned into pSV.Sport which already
 CC contained the 25D2 H chain fragments. The primers given in AAQ48367-72
 CC were used in further manipulations to amplify a human gamma4 constant
 CC region cDNA which was used to replace genomic DNA. The humanised MAb is
 CC an IL-4 antagonist. It may be used in a pharmaceutical composition for
 CC detecting, measuring and immunopurifying human IL-4 and blocking IL-4
 CC activity in IL-4-related diseases. (Updated on 25-MAR-2003 to correct PN
 CC field.)
 CC
 XX Sequence 21 BP; 4 A; 9 C; 6 G; 2 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 9.4e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 598 CATGTCACGGCGTGGAG 616
 DB 21 CATGTCACGGCGTGGAG 3
 RESULT 762
 AAQ98860/C
 ID AAQ98860 standard; DNA; 21 BP.
 XX
 XX AAQ98860;
 AC
 XX 19-APR-1996 (first entry)
 DT
 XX Anti-human IL-4 MAb h25D2-9 heavy variable region PCR primer 2232.
 DE
 XX Anti-human interleukin-4; IL-4; humanised; purification; treatment;
 KW IL-4 diseases; immunoassay; heavy chain; h25D2-9; variable region;
 KW PCR primer 2232; antibody; ss.
 XX
 OS Synthetic.
 XX

PN WO9524481-A2.
 XX
 XX 14-SEP-1995.
 PD
 XX 08-MAR-1995; 95WO-US002400.
 PF
 XX 10-MAR-1994; 94US-00208886.
 PR
 XX (SCHE) SCHERING CORP.
 PA
 XX Dalie B, Miller K, Murgolo N, Tindall S;
 PI WPI; 1995-328272/42.
 DR
 XX Humanised monoclonal antibody against human interleukin (IL)-4 - has
 PT increased binding affinity and expression, and hence greater therapeutic
 PT value in the treatment of IL-4 related diseases.
 PT
 XX Example 2; Page 84; 116pp; English.
 PS
 XX The primers AAQ98858-67 were used in the PCR amplification of the anti-
 CC human IL-4 humanised monoclonal antibody (MAb) h25D2-9 heavy chain
 CC variable region cDNA. The Ab fragment encoded by the cDNA can be used as
 CC an antigenic fragment for the prepn., purificn. and immunoassay of the
 CC humanised Abs. Pharmaceutical compns. and anti-idiotypic Abs (against
 CC the MAb) can also be prepd. for the treatment of IL-4 related diseases by
 CC respectively suppressing, or imitating the binding activity of IL-4
 CC
 XX Sequence 21 BP; 4 A; 9 C; 6 G; 2 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 9.4e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 598 CATGTCACGGCGTGGAG 616
 DB 21 CATGTCACGGCGTGGAG 3
 RESULT 763
 AAT33317/C
 ID AAT33317 standard; DNA; 21 BP.
 XX
 XX AAT33317;
 AC
 XX 18-OCT-1996 (first entry)
 DT
 XX Tyrosinase mRNA detection primer, binds to bases 1297-1317.
 DE
 XX Human; tyrosinase; detection; primer; reverse transcription; amplify;
 KW transcription region; detection; ss.
 KW
 XX Synthetic.
 OS
 XX JP08140699-A.
 PN
 XX 04-JUN-1996.
 PD
 XX 22-NOV-1994; 94JP-00288041.
 PF
 XX 22-NOV-1994; 94JP-00288041.
 PR
 XX (POKK) POLA CHEM IND INC.
 PA
 XX WPI; 1996-316329/32.
 DR
 XX Detection of tyrosinase mRNA - by amplification of tyrosinase mRNA allows
 PT accurate detection of trace amounts of RNA.
 PT
 XX Claim 4; Page 9; 10pp; Japanese.
 PS
 XX The sequences given in AAT33317-24 are primers which were used in the
 CC method of the invention to detect mRNA encoding human tyrosinase. The

CC method comprises synthesising tyrosinase cDNA from a sample by reverse
 CC transcription and then amplifying the cDNA using primers specific for, or
 CC complementary to, sequences within the transcription region of the
 CC tyrosinase gene. Amplification using these primers produces a competitive
 CC cDNA which can also be amplified. This method can be used to specifically
 CC detect trace amounts of human tyrosinase mRNA

XX SQ Sequence 21 BP; 3 A; 7 C; 2 G; 9 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 9.4e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1420 CCAGAGGAGAGAGAGAG 1438
 Db 21 CAAGAGGAGAGAGATGATG 3

RESULT 764
 AAT60517/c
 ID AAT60517 standard; DNA; 21 BP.

XX AC AAT60517;
 XX 10-JUN-1997 (first entry)

XX DE Probe CAMP P.1.

XX Probe; polymerase chain reaction; amplify; infection; forensic science;
 KW infectious pathogen; genetic disorder; genetic variance; primer; ss.
 XX Synthetic.

XX US5612473-A.

XX 18-MAR-1997.

XX 16-JAN-1996; 96US-00587209.

XX 16-JAN-1996; 96US-00587209.

XX (GULL-) GULL LAB.

XX Glass MJ, Coombs J, Wu L, Malmstrom SL;

XX WPI; 1997-192163/17.

XX Processing samples for amplification of nucleic acid target sequences -
 CC using extraction buffer containing at least one detergent and a salt
 CC composition of greater than 1 molar concentration.

XX Example 3; Col 19; 21pp; English.

XX AAT60515-T60520 represent probes for the sequences amplified by the
 CC primers shown in AAT60503-T60514. The primers are used to amplify DNA
 CC sequences present in a sample processed by the method of the invention.
 CC The processing method of the invention comprises obtaining a sample of
 CC material potentially containing the target nucleic acid sequences, and
 CC mixing the sample with an external buffer solution. The buffer solution
 CC comprises two detergents, and at least one salt composition present in a
 CC greater than 1 M concentration. The mixture is then centrifuged to obtain
 CC a supernatant portion, which is then heated before being re-centrifuged to
 CC precipitate the proteins, and obtaining a second supernatant portion,
 CC from which nucleic acids are precipitated. The isolated nucleic acids are
 CC then dissolved. The method provides a rapid means of preparing a sample
 CC for amplification so that multiple analytes can be detected and
 CC differentiated within a relatively short time period (typically less than
 CC 5 hours with the novel pre-processing step taking less than 5 minutes).
 CC Typical applications of nucleic acid amplification include detection of
 CC infections in patients, foodstuffs and for diagnostic/forensic or quality
 CC control purposes, to discriminate between multiple potential infectious
 CC pathogens, to diagnose genetic disorders or to identify genetic variances

SQ Sequence 21 BP; 6 A; 5 C; 3 G; 7 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 9.4e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1355 GCAAGAACTCTTCCAACTT 1373
 Db 20 GCAAGAACTGTTCACAGTT 2

RESULT 765
 AAT85051/c
 ID AAT85051 standard; DNA; 21 BP.

XX AC AAT85051;

XX 27-MAR-1998 (first entry)

XX Detecting multiple analytes by Campylobacter gene specific probe.
 KW Multiple analyte; target; fluorescent technology; detection; dye;
 KW hybridisation; probe; Campylobacter species; ss.

XX Synthetic.

XX Campylobacter sp.

XX EP794261-A2.

XX 10-SEP-1997.

XX 17-MAY-1996; 96EP-00303496.

XX 05-MAR-1996; 96US-00613805.

XX (GULL-) GULL LAB INC.

XX Glass MJ, Coombs J, Malmstrom SL, Wu L;

XX WPI; 1997-437483/41.

XX Detecting and discriminating multiple target nucleic acid sequences -
 CC using multiple fluorescent dye labels.

XX Claim 15; Page 7; 28pp; English.

XX This Campylobacter gene specific probe CAMP P.1 is used in a new method
 CC for detecting and distinguishing between multiple target nucleic acid
 CC sequences within a single sample. The method comprises obtaining multiple
 CC probe oligonucleotides where each probe is complementary to a portion of
 CC one strand of a target nucleic acid sequence, forming hybrids with that
 CC target sequence, and attaching multiple fluorescent dyes to either the
 CC probe or the target nucleic acid sequence so that each hybrid comprises a
 CC component labelled with a different fluorescent dye. Effective
 CC hybridisation of the probe and the target nucleic acid sequence, if
 CC present, within the sample forms different fluorescent dye- labelled
 CC hybrids. Non-hybridised fluorescent dye-labelled components are removed
 CC and different fluorescent dye-labelled hybrids within the sample are
 CC directly detected and discriminated with a fluorescence reader
 CC instrument. The multiple fluorescent dyes used in the above method can be
 CC selected by a method which comprises attaching these fluorescent dyes to
 CC different probe oligonucleotides and combining the multiple fluorescent
 CC dye-labelled oligonucleotides in solution approximating nucleic acid
 CC hybridisation conditions. The excitation and emission spectra for the
 CC multiple fluorescent dye-labelled oligonucleotides in solution are
 CC analysed to determine a distinguishable spectra range for each
 CC fluorescent dye-labelled oligonucleotide. Settings for a filter
 CC combination are designed to detect and discriminate the spectrally
 CC distinguishable multiple fluorescent dye-labelled oligonucleotides with a
 CC fluorescence reading instrument. The methods are used for distinguishing
 CC between multiple analytes in a sample using fluorescence technology. The
 CC methods are exemplified using probes specific for Salmonella, Shigella,
 CC E. coli, Campylobacter, Yersinia and a human beta-globin gene probe. The

CC method is rapid, accurate and convenient enough for routine use in a
 CC clinical laboratory
 CC
 SQ Sequence 21 BP; 6 A; 5 C; 3 G; 7 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 9.4e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1355 GCAAGAACTCTTCCAACTT 1373
 Db 20 GCAAGAAAGTGTCCAAAGTT 2
 RESULT 766
 AAT85054
 ID AAT85054 standard; DNA; 21 BP.
 XX
 AC AAT85054;
 XX
 DT 27-MAR-1998 (first entry)
 DE Anti-probe alphaCAMP P.1.
 XX
 KW Multiple analyte; target; fluorescent technology; detection; dye;
 KW hybridisation; probe; Campylobacter species; ss.
 XX
 OS Synthetic.
 OS Campylobacter sp.
 XX
 PN EP794261-A2.
 XX
 PD 10-SEP-1997.
 XX
 PF 17-MAY-1996; 96EP-00303496.
 XX
 PR 05-MAR-1996; 96US-00613805.
 XX
 PA (GULL-) GULL LAB INC.
 XX
 PI Glass MJ, Coombs J, Malmstrom SL, Wu L;
 XX
 DR WPI; 1997-437483/41.
 XX
 PT Detecting and discriminating multiple target nucleic acid sequences -
 PT using multiple fluorescent dye labels.
 XX
 PS Claim 15; Page 8; 28pp; English.
 XX
 CC This anti-probe alphaCAMP P.1 hybridises to a Campylobacter gene specific
 CC probe CAMP P.1 in a DNA hybridisation/fluorescent detection experiment.
 CC It can be used in a new method for detecting and distinguishing between
 CC multiple target nucleic acid sequences within a single sample. The method
 CC comprises obtaining multiple probe oligonucleotides where each probe is
 CC complementary to a portion of one strand of a target nucleic acid
 CC sequence, forming hybrids with that target sequence, and attaching
 CC multiple fluorescent dyes to either the probe or the target nucleic acid
 CC sequence so that each hybrid comprises a component labelled with a
 CC different fluorescent dye. Effective hybridisation of the probe and the
 CC target nucleic acid sequence, if present, within the sample forms
 CC different fluorescent dye-labelled hybrids. Non-hybridised fluorescent
 CC dye-labelled components are removed and different fluorescent dye-
 CC labelled hybrids within the sample are directly detected and
 CC discriminated with a fluorescence reader instrument. The multiple
 CC fluorescent dyes used in the above method can be selected by a method
 CC which comprises attaching these fluorescent dyes to different probe
 CC oligonucleotides and combining the multiple fluorescent dye-labelled
 CC oligonucleotides in solution approximating nucleic acid hybridisation
 CC conditions. The excitation and emission spectra for the multiple
 CC fluorescent dye-labelled oligonucleotides in solution are analysed to
 CC determine a distinguishable spectra range for each fluorescent dye-
 CC labelled oligonucleotide. Settings for a filter combination are designed
 CC to detect and discriminate the spectrally distinguishable multiple

CC fluorescent dye-labelled oligonucleotides with a fluorescence reading
 CC instrument. The methods are used for distinguishing between multiple
 CC analytes in a sample using fluorescence technology. The methods are
 CC exemplified using probes specific for Salmonella, Shigella, E. coli,
 CC Campylobacter, Yersinia and a human beta-globin gene probe. The method is
 CC rapid, accurate and convenient enough for routine use in a clinical
 CC laboratory
 XX
 SQ Sequence 21 BP; 7 A; 3 C; 5 G; 6 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 9.4e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1355 GCAAGAACTCTTCCAACTT 1373
 Db 2 GCAAGAAAGTGTCCAAAGTT 20
 RESULT 767
 AAV52716/C
 ID AAV52716 standard; DNA; 21 BP.
 XX
 AC AAV52716;
 XX
 DT 21-DEC-1998 (first entry)
 DE Hepatocyte nuclear factor 1 beta gene exon 9 reverse PCR primer.
 XX
 KW Hepatocyte nuclear factor 1 beta; HNF-1 beta; MODY4; human;
 KW transcription factor; maturity onset diabetes of the young; TCF2;
 KW diabetes; NIDDM; diagnosis; therapy; PCR; primer; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 PN WO9811254-A1.
 XX
 PD 19-MAR-1998.
 XX
 PF 10-SEP-1997; 97WO-US016037.
 XX
 PR 10-SEP-1996; 96US-0025719P.
 PR 02-OCT-1996; 96US-0028056P.
 PR 30-OCT-1996; 96US-0029679P.
 XX
 PA (ARCH-) ARCH DEV CORP.
 XX
 PI Bell GI, Yamagata K, Oda N, Kaisaki PJ, Furuta H, Menzel S;
 PI Horikawa Y;
 XX
 DR WPI; 1998-271667/24.
 XX
 PT Isolated nucleic acid encoding hepatocyte nuclear factor 1-alpha and 1-
 PT beta - useful for detecting susceptibility for non-insulin dependent
 PT diabetes, especially maturity-onset diabetes of the young.
 XX
 PS Example 8; Page 146; 363pp; English.
 XX
 CC This is a reverse PCR primer designed for use with a forward primer (see
 CC AAV52715) in the PCR amplification of exon 9 of the human hepatocyte
 CC nuclear factor-1 beta (HNF-1 beta) TCF2 gene (see AAV52730). Mutations of
 CC the HNF-1 beta gene have been identified by amplifying (see AAV52693-716)
 CC and sequencing the appropriate exon. The invention concerns the
 CC identification of genes responsible for non-insulin dependent diabetes
 CC mellitus (NIDDM) for use in diagnostics and therapeutics. It demonstrates
 CC that the MODY4 (maturity-onset diabetes of the young) locus is the HNF-1
 CC beta gene. Analysis of mutations in the HNF-1 beta gene can be diagnostic
 CC for diabetes
 XX
 SQ Sequence 21 BP; 5 A; 7 C; 5 G; 4 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.2; DB 1; Length 21;

Best Local Similarity 84.2%; Pred. No. 9.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1659 CTCAGGCGACGTGTGCTGG 1677
Db 21 CTCTGGCGACGTGTGCTGG 3

RESULT 768

AAV25951/c

ID AAV25951 standard; DNA; 21 BP.

XX AC

XX AC

XX AAV25951;

XX 15-JUL-1998 (first entry)

XX DE

XX Oligonucleotide probe for Campylobacter CAMP P.1.

XX Sequence-specific; probe; enterohaemorrhagic; Escherichia coli;

KW Salmonella; Campylobacter; Shigella; Yersinia; beta-globin;

KW gastroenteritis; ss.

XX Synthetic.

OS Campylobacter sp.

XX US753444-A.

PN 19-MAY-1998.

XX 07-AUG-1996; 96US-00689235.

XX 16-JAN-1996; 96US-00587209.

XX (GULL-) GULL LAB INC.

XX Malmstrom SL, Glass MJ, Wu L, Coombs J;

XX WPI; 1998-311393/27.

XX Distinguishing between similar nucleic acid samples - using sequence-specific probes e.g. between enterohaemorrhagic and normal Escherichia coli.

XX Example 3; Col 18; 21pp; English.

CC The present sequence represents a probe used in an example of the present invention. The present invention describes a method for detecting

CC mismatches between first and second nucleic acid sequences having at

CC least one base difference. The method comprises: (a) obtaining at least

CC one labelled probe consisting of an oligonucleotide sequence spanning the

CC location of at least one base difference between the first and second

CC sequences, where the oligonucleotide sequence contains at least one

CC neutral base molecule in a position other than the position of the base

CC difference(s) but is otherwise exactly complementary to the first

CC sequence, so that the probe hybridises more weakly with the second

CC sequence than with the first sequence; (b) mixing the probe(s) with the

CC first and second sequences under hybridisation conditions; (c)

CC dissociating any probe/second sequence hybrids; and (d) detecting

CC probe/first sequence hybrids. The method can be used to distinguish

CC between similar DNA/RNA sequences in a sample, especially to distinguish

CC enterohaemorrhagic E. coli O157:H7 from other E. coli strains e.g. in

CC stool samples from people suffering from gastroenteritis, caused

CC specifically by enterohaemorrhagic E. coli. Use of the method shortens the

CC time between sample preparation to obtaining results, than has been

CC possible with previous similar procedures

XX Sequence 21 BP; 6 A; 5 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 21;

Best Local Similarity 84.2%; Pred. No. 9.4e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1355 GCAAGAACTCTTCCAACTT 1373

XX Sequence 21 BP; 6 A; 5 C; 3 G; 7 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 21;

Best Local Similarity 84.2%; Pred. No. 9.4e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Db 20 GCAAGAACTCTTCCAACTT 2

RESULT 769

AAV38610/c

ID AAV38610 standard; DNA; 21 BP.

XX AC

XX AAV38610;

XX 17-SEP-1998 (first entry)

XX DE

XX PCR primer 34 used to amplify a portion of the amyE gene.

XX amyE gene; strain A164; mutant Bacillus; biosynthesis; surfactin;

KW production; hormone; enzyme; receptor; PCR primer; ss.

XX Synthetic.

OS Bacillus subtilis.

XX WO9822598-A1.

XX 28-MAY-1998.

XX 18-NOV-1997; 97WO-US021084.

XX 18-NOV-1996; 96US-00749521.

XX 12-JUN-1997; 97US-0049441P.

XX (NOVO) NOVO NORDISK BIOTECH INC.

XX Sioma A, Sternberg D, Adams LF, Brown S;

XX WPI; 1998-312483/27.

XX Producing polypeptides in Bacillus cells - which are modified to reduce production of surfactin, useful for, e.g. producing hormones or enzymes.

XX Example 8; Page 30; 43pp; English.

CC PCR primers AAV38609-10 were used to amplify the different portions of the amyE gene of Bacillus subtilis strain A164. The portions were cloned

CC to create a partially deleted amyE gene. This was used in the course of

CC the invention. The specification describes the production of a

CC polypeptide. This comprises culturing a mutant Bacillus that includes

CC nucleic acid encoding the polypeptide and nucleic acid containing a

CC modified form of at least 1 gene involved in biosynthesis of a surfactin

CC or its isoforms. The mutant organism produces less surfactin, or isoform,

CC than wild-type Bacillus. The method may be used to produce hormones,

CC enzymes and receptors, which are either heterologous or homologous

XX Sequence 21 BP; 4 A; 7 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 21;

Best Local Similarity 84.2%; Pred. No. 9.4e+02;

Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 707 GGGCTGGCAAGGCAACTA 725

Db 21 GTGCTGGCAATGCGGTA 3

RESULT 770

AAV20856/c

ID AAV20856 standard; DNA; 21 BP.

XX AC

XX AAV20856;

XX 01-JUL-1998 (first entry)

XX Campylobacter CAMP P.1 probe.

XX Escherichia coli strain O157:H7; detection; microorganism; infection;


```

KW enterohaemorrhagic; hybridisation; probe; ss.
XX Synthetic.
OS Campylobacter sp.
XX US5738995-A.
XX 14-APR-1998.
XX 07-AUG-1996; 96US-00689236.
XX 16-JAN-1996; 96US-00587209.
XX (GULL-) GULL LAB INC.
XX Malmstrom SL, Glass MJ, Wu L, Coombs J;
XX WPI; 1998-260031/23.
XX Probes for detecting Escherichia coli strain O157:H7 - useful for
XX diagnosis of enterohaemorrhagic Escherichia coli infection(s).
XX Example 3; Col 18; 21pp; English.
XX The present sequence represents a probe used in an example of the present
XX invention. The present invention describes probes used in the detection
XX of Escherichia coli strain O157:H7 in a sample. The method of detection
XX comprises: (a) obtaining at least 1 probe specifically given in the
XX specification, labelled with a label that permits probe detection when
XX hybridised to a complementary nucleic acid sequence which is specific for
XX a nucleic acid sequence of the microorganism; (b) hybridising the probes
XX and the sample, and (c) detecting hybrids comprising the probes and the
XX nucleic acid sequences. The method and probes may be used for diagnosis
XX of enterohaemorrhagic E. coli infections. The methods and the materials
XX permit the detection and discrimination of multiple analytes
XX
XX Sequence 21 BP; 6 A; 5 C; 3 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 9.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1355 GCAAGAACTCTTCCAACTT 1373
Db 20 GCAAGAAAGTGTCCAAAGTT 2
RESULT 771
AAV31455/c
ID AAV31455 standard; DNA; 21 BP.
XX AAV31455;
XX 11-AUG-1998 (first entry)
XX Campylobacter target nucleic acid sequence detecting probe CAMP P.1.
XX Salmonella; microorganism; detection; multiple analyte; probe; Yersinia;
XX Escherichia coli; Campylobacter; ss.
XX Synthetic.
XX Campylobacter sp.
XX US5756701-A.
XX 26-MAY-1998.
XX 06-AUG-1996; 96US-00692725.
XX 16-JAN-1996; 96US-00587209.
XX (GULL-) GULL LAB INC.
XX
KW Malmstrom SL, Glass MJ, Coombs J, Wu L;
XX WPI; 1998-321634/28.
XX Nucleic acid probes and primers - for detecting Salmonella, Yersinia or
XX E. coli.
XX Claim 13; Col 17; 21pp; English.
XX This probe is used for the detection of Campylobacter target nucleic acid
XX sequences. The invention provides nucleic acid probes and primers for
XX detecting Salmonella, Yersinia or E. coli. It provides methods and
XX apparatus for detecting and discriminating multiple analytes within a
XX test sample. The methods are simple, user-friendly, cost effective and
XX fast. The methods and the probes and primer sequences are used for
XX detecting the corresponding microorganisms in clinical samples
XX
XX Sequence 21 BP; 6 A; 5 C; 3 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 9.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1355 GCAAGAACTCTTCCAACTT 1373
Db 20 GCAAGAAAGTGTCCAAAGTT 2
RESULT 772
AAAX19385
ID AAX19385 standard; DNA; 21 BP.
XX AAX19385;
XX 19-MAY-1999 (first entry)
XX Sonic hedgehog protein PCR forward primer.
XX Secreted protein; microsome; signal peptide; PCR primer; ss.
XX Synthetic.
XX WO9905256-A2.
XX 04-FEB-1999.
XX 24-JUL-1998; 98WO-US015394.
XX 24-JUL-1997; 97US-0053586P.
XX (HARD ) HARVARD COLLEGE.
XX Kirschner MW, Kinoshita N;
XX WPI; 1999-153316/13.
XX Isolating nucleic acids encoding proteins comprising a signal peptide -
XX by translating RNA and isolating translated RNA that is associated with
XX microsomes, useful as therapeutic agents.
XX Example 2; Page 33; 45pp; English.
XX The present invention describes the isolation of nucleic acid (I) that
XX encodes a protein (II) having a signal peptide (SP), which comprises
XX isolating RNA molecules (III) that are associated with microsomes under
XX conditions where (III) is at least partly translated. Also described are:
XX (1) a library of (I) encoding (II) comprising SP; (2) (I) isolated by the
XX above method; and (3) (II) encoded by (I). (I) and (II) are useful
XX therapeutically, typically (II) are cell growth factors such as
XX cytokines, interleukins, colony-forming factors, possibly useful in
XX treatment of cancer. (I) are also used: as tissue and molecular weight
XX markers; as chromosome tags; to detect possible genetic disorders; as
XX hybridisation probes to identify related nucleic acid; as primers for DNA

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CC fingerprinting; to generate antibodies; and in interaction trap assays to
 CC identify gene encoding specific binding agents. (II) are useful in drug
 CC screening, for raising antibodies (e.g. for use as immunoassay reagents)
 CC and to induce an immune response. The method is more efficient and
 CC reliable than the sequence trap system. It does not involve formation of
 CC a fusion protein (rather natural proteins are selected) and (II) do not
 CC have to be secreted. The present sequence represents a PCR primer which
 CC is used in an example from the present invention
 XX
 SQ Sequence 21 BP; 5 A; 10 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 9.4e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1090 CTCACATCAGTCTCTTCCA 1108
 Db 3 CTCACAGACGACCTTCCA 21

RESULT 773
 AAX08681/C
 ID AAX08681 standard; DNA; 21 BP.

XX AAX08681;
 AC
 XX 27-SEP-1999 (first entry)
 DT
 XX

XX Oligonucleotide derived from pinene synthase.

DE Myrcene synthase; limonene synthase; pinene synthase; flavour;
 KW monoterpene synthase; aroma; defense; plant seed; oil; meal; primer; PCR;
 KW SS.
 KW

XX Synthetic.

XX WO9902030-A1.

XX 21-JAN-1999.

XX 10-JUL-1998; 98WO-US014528.

XX 11-JUL-1997; 97US-0052249P.

XX (UNIW) UNIV WASHINGTON STATE RES FOUND.

XX Bohlmann J, Steele CL, Croteau RB;

XX WPI; 1999-120396/10.

XX P-PSDB; AAW85716.

XX New isolated gymnosperm monoterpene synthase DNA - obtained from Grand
 PT fir (Abies grandis), used to provide plants with modified production of
 PT monoterpenes, e.g. myrcene, limonene or pinene.

XX Example 11; Page 117; 121pp; English.

XX Nucleotide sequences encoding myrcene synthase, limonene synthase and
 CC pinene synthase from Grand fir may be incorporated into any organism
 CC (e.g. intact plant, animal, microbe), or derived cell culture that
 CC produces geranyl diphosphate for the production of the aforementioned
 CC enzymes or their products. The sequences when expressed in transfected
 CC cells may also be used for the production or modification of flavour and
 CC aroma properties, improvement of defense capability, and the alteration
 CC of other ecological interactions mediated by myrcene, limonene, pinene,
 CC or their derivatives. In particular they can be used for the production
 CC of plant seeds for the extraction of oil or meal. Peptides derived from
 CC conserved regions of the synthase sequences can be used to create
 CC degenerate primers which can be used for screening/amplification

XX Sequence 21 BP; 4 A; 3 C; 10 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 21;

Best Local Similarity 84.2%; Pred. No. 9.4e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 1274 GCATCTCGATCTGCTCTC 1292
 Db 19 GCATCTCCAGCAGCTCTC 1

RESULT 774

AAX57065/C

ID AAX57065 standard; DNA; 21 BP.

XX AAX57065;

XX 22-JUL-1999 (first entry)

XX Human KCNQ gene primer 6.

XX KCNQ2; KCNQ3; human; murine; potassium channel; diagnosis; prognosis;
 KW benign familial neonatal epilepsy; BFNE; juvenile myotonic epilepsy; JME;
 KW rolandic epilepsy; mutant; treatment; screening; epilepsy; detection;
 KW gene therapy; drug screening; primer; ss.

XX Synthetic.

XX OS Homo sapiens.

XX WO9921875-A1.

XX 06-MAY-1999.

XX 23-OCT-1998; 98WO-US022375.

XX 24-OCT-1997; 97US-0063147P.

XX (UTAH) UNIV UTAH RES FOUND.

XX Singh NA, Leppert MF, Charlier C;

XX WPI; 1999-312938/26.

XX Nucleic acid encoding potassium channels KCNQ2 and 3.

XX Example 10; Page 140; 195pp; English.

XX This invention describes novel human and mouse potassium channel proteins
 CC KCNQ2 and KCNQ3. Detecting mutations in sequences that encode KCNQ2 or
 CC KCNQ3, or the loss of one copy of these genes, is used for diagnosis and
 CC prognosis of benign familial neonatal epilepsy (BFNE), juvenile myotonic
 CC epilepsy (JME) or rolandic epilepsy (RE). Cells (or transgenic animals)
 CC that express wild-type or mutant KCNQ2 or 3 (also the proteins themselves
 CC in cell-free form) are used to screen for agents that can be used to
 CC treat or prevent these forms of epilepsy. Fragments of the encoding
 CC nucleic acids are used as probes or primers, either for detecting
 CC mutations or for isolation of related sequences, while the complete
 CC sequences may be used in gene therapy to provide wild-type protein.
 CC Antibodies specific for mutant or wild-type proteins are used as
 CC diagnostic reagents and for drug screening. The KCNQ2 and 3 proteins are
 CC useful in rational design of drugs and therapeutically (in replacement
 CC therapies). The forms of epilepsy associated with mutations in KCNQ2 and
 CC 3 sequences can now be diagnosed early (before symptoms are manifest),
 CC and better treatment options will be available. AAX57060-X57071 are
 XX primers used in the method of the invention

XX Sequence 21 BP; 7 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 21;

Best Local Similarity 84.2%; Pred. No. 9.4e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 501 GGCATCTGGCTTCTGTAC 519

Db 21 GGAGACTGGCTTCTGTAC 3

```

RESULT 775
AAZ72465
ID AAZ72465 standard; DNA; 21 BP.
XX
AC AAZ72465;
XX
DT 10-SEP-2001 (first entry)
XX
DE Human biallelic marker upstream amplification primer SEQ ID NO:6821.
XX
XX Human genome; biallelic marker; high density disequilibrium map;
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW haplotyping; hybridisation; identification; characterisation;
KW amplification; single nucleotide polymorphism; SNP; PCR primer;
XX diagnosis; ss.
XX
OS Homo sapiens.
XX
PN WO9954500-A2.
XX
PD 28-OCT-1999.
XX
PF 21-APR-1999; 99WO-IB000822.
XX
PR 21-APR-1998; 98US-0082614P.
PR 23-NOV-1998; 98US-0109732P.
XX
PA (GEST ) GENSET.
XX
PI Cohen D, Blumenfeld M, Chumakov I;
XX
DR WPI; 2000-013267/01.
XX
PT Novel biallelic markers used to construct a high density disequilibrium
PT map of the human genome.
XX
PS Claim 9; Page 1685; 2745pp; English.
XX
XX AAZ65654 to AAZ69578 represent human biallelic markers from the present
CC invention, which contain a polymorphic base at position 24 of their
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
CC primers for the biallelic markers. The biallelic markers of the invention
CC have a variety of uses: they can be used for high density mapping of the
CC human genome, and in complex association studies and haplotyping studies
CC which are useful in determining the genetic basis for disease states.
CC Compositions and methods of the invention can also be useful for the
CC identification of the targets for the development of pharmaceutical
CC agents and diagnostic methods, as well as the characterisation of the
CC differential efficacious responses to and side effects from
CC pharmaceutical agents acting on a disease as well as other treatment.
CC N.B. The SEQ ID Nos 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
CC 3367, are not actually given a sequence in the Sequence Listing from the
CC present invention
XX
SQ Sequence 21 BP; 8 A; 3 C; 8 G; 2 T; 0 U; 0 Other;
Query Match 0.7%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 9.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1425 GGAGGAGAGAGAGTCACC 1443
||||| ||||| ||||| |||||
Db 1 GGAGGAGAGAGCGATTACC 19

RESULT 776
AAZ71334/C
ID AAZ71334 standard; DNA; 21 BP.
XX
AC AAZ71334;
XX
DT 10-SEP-2001 (first entry)
XX
DE Human biallelic marker upstream amplification primer SEQ ID NO:6821.
XX
XX Human genome; biallelic marker; high density disequilibrium map;
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW haplotyping; hybridisation; identification; characterisation;
KW amplification; single nucleotide polymorphism; SNP; PCR primer;
XX diagnosis; ss.
XX
OS Homo sapiens.
XX
PN WO9954500-A2.
XX
PD 28-OCT-1999.
XX
PF 21-APR-1999; 99WO-IB000822.
XX
PR 21-APR-1998; 98US-0082614P.
PR 23-NOV-1998; 98US-0109732P.
XX
PA (GEST ) GENSET.
XX
PI Cohen D, Blumenfeld M, Chumakov I;
XX
DR WPI; 2000-013267/01.
XX
PT Novel biallelic markers used to construct a high density disequilibrium
PT map of the human genome.
XX
PS Claim 9; Page 1685; 2745pp; English.
XX
XX AAZ65654 to AAZ69578 represent human biallelic markers from the present
CC invention, which contain a polymorphic base at position 24 of their
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
CC primers for the biallelic markers. The biallelic markers of the invention
CC have a variety of uses: they can be used for high density mapping of the
CC human genome, and in complex association studies and haplotyping studies
CC which are useful in determining the genetic basis for disease states.
CC Compositions and methods of the invention can also be useful for the
CC identification of the targets for the development of pharmaceutical
CC agents and diagnostic methods, as well as the characterisation of the
CC differential efficacious responses to and side effects from
CC pharmaceutical agents acting on a disease as well as other treatment.
CC N.B. The SEQ ID Nos 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
CC 3367, are not actually given a sequence in the Sequence Listing from the
CC present invention
XX
SQ Sequence 21 BP; 8 A; 3 C; 8 G; 2 T; 0 U; 0 Other;
Query Match 0.7%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 9.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1425 GGAGGAGAGAGAGTCACC 1443
||||| ||||| ||||| |||||
Db 1 GGAGGAGAGAGCGATTACC 19

RESULT 777
AAZ89347/C
ID AAZ89347 standard; DNA; 21 BP.
XX
AC AAZ89347;
XX
DT 13-JUN-2000 (first entry)
XX
DE Human UCP3 protein PCR primer #9.
XX
KW UCP3; uncoupling protein 3; human; promoter; fat cell; transcription;
KW fat metabolism; PCR primer; ss.
XX
OS Homo sapiens.
XX

```

```

XX
DE Human biallelic marker upstream amplification primer SEQ ID NO:5690.
XX
KW Human genome; biallelic marker; high density disequilibrium map;
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW haplotyping; hybridisation; identification; characterisation;
KW amplification; single nucleotide polymorphism; SNP; PCR primer;
KW diagnosis; ss.
XX
OS Homo sapiens.
XX
PN WO9954500-A2.
XX
PD 28-OCT-1999.
XX
PF 21-APR-1999; 99WO-IB000822.
XX
PR 21-APR-1998; 98US-0082614P.
PR 23-NOV-1998; 98US-0109732P.
XX
PA (GEST ) GENSET.
XX
PI Cohen D, Blumenfeld M, Chumakov I;
XX
DR WPI; 2000-013267/01.
XX
PT Novel biallelic markers used to construct a high density disequilibrium
PT map of the human genome.
XX
PS Claim 8; Page 1444; 2745pp; English.
XX
XX AAZ65654 to AAZ69578 represent human biallelic markers from the present
CC invention, which contain a polymorphic base at position 24 of their
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
CC primers for the biallelic markers. The biallelic markers of the invention
CC have a variety of uses: they can be used for high density mapping of the
CC human genome, and in complex association studies and haplotyping studies
CC which are useful in determining the genetic basis for disease states.
CC Compositions and methods of the invention can also be useful for the
CC identification of the targets for the development of pharmaceutical
CC agents and diagnostic methods, as well as the characterisation of the
CC differential efficacious responses to and side effects from
CC pharmaceutical agents acting on a disease as well as other treatment.
CC N.B. The SEQ ID Nos 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
CC 3367, are not actually given a sequence in the Sequence Listing from the
CC present invention
XX
SQ Sequence 21 BP; 2 A; 5 C; 4 G; 10 T; 0 U; 0 Other;
Query Match 0.7%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 9.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1436 AAGTCACCGAAGAGGAGAA 1454
||||| ||||| ||||| |||||
Db 20 AAGTCACAGACAGACTAGAA 2

RESULT 777
AAZ89347/C
ID AAZ89347 standard; DNA; 21 BP.
XX
AC AAZ89347;
XX
DT 13-JUN-2000 (first entry)
XX
DE Human UCP3 protein PCR primer #9.
XX
KW UCP3; uncoupling protein 3; human; promoter; fat cell; transcription;
KW fat metabolism; PCR primer; ss.
XX
OS Homo sapiens.
XX

```

PN DE19838837-A1.
 XX
 PD 02-MAR-2000.
 XX
 XX 27-AUG-1998; 98DE-01038837.
 XX
 XX 27-AUG-1998; 98DE-01038837.
 PR
 XX (BOEH) BOEHRINGER INGELHEIM INT GMBH.
 PA (NOVO) NOVO-NORDISK AS.
 XX
 XX Esterbauer H, Oberkofler H, Patsch W;
 FI
 XX WPI; 2000-272214/24.
 XX
 DR Recombinant fat and muscle tissue specific uncoupling protein 3 promoters
 XX useful for identifying UCP3 modulators.
 PT
 XX
 XX Example 1; Page 7; 38pp; German.
 PS
 XX This invention describes novel recombinant DNA molecules containing an
 CC uncoupling protein 3 (UCP-3) promoter DNA sequence active in fat cells
 CC but not functional in muscle cells or vice versa. The recombinant DNA
 CC molecules are useful for transcriptions of genes and, with host cells, to
 CC test for substances that can influence transcription. They can also be
 CC used to identify modulators of UCP3 promoters. UCP3 plays a role in fat
 CC metabolism and control of the promoter is useful in combating diseases
 CC with inappropriate fat tissue metabolism. AA289339-Z89347 represent PCR
 CC primers used in the isolation and amplification of the human UCP-3
 CC protein described in the method of the invention
 XX
 SQ Sequence 21 BP; 5 A; 3 C; 8 G; 5 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 9.4e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1938 TACCTTCCCACTGGCCTCA 1956
 DB 21 TACCTTCCCACTGGACACA 3
 RESULT 778
 AAA95321
 ID AAA95321 standard; DNA; 21 BP.
 XX
 AC AAA95321;
 XX
 DT 12-FEB-2001 (first entry)
 XX
 DE B. cereus zwittermixin A coding sequence sequencing primer #5.
 XX
 XX Zwittermixin A; aminopolylol antibiotic; crop protection; phytopathogen;
 KW biocontrol agent; infectious disease; PCR primer; ss.
 XX
 OS Bacillus cereus.
 XX
 PN WO200058351-A2.
 XX
 PD 05-OCT-2000.
 XX
 PF 22-MAR-2000; 2000WO-US007570.
 XX
 XX 23-MAR-1999; 99US-0125769P.
 PR
 XX (WISC) WISCONSIN ALUMNI RES FOUND.
 PA
 PI Handelsman J, Milner JL, Stohl EA, Emmert EA;
 XX
 XX WPI; 2000-647222/62.
 DR
 XX Novel Bacillus cereus nucleic acid molecule useful for synthesis of
 PT zwittermixin A for protecting crops against phytopathogens.
 PT

XX Example 1; Page 22; 80pp; English.
 PS
 XX The present invention describes the coding sequence for the enzymes from
 CC Bacillus cereus which form the zwittermixin A aminopolylol antibiotic.
 CC These enzymes are known as Orf1, Orf2, Orf3 and Zmar. The antibiotic is
 CC useful in plants as a biocontrol agent as it help protect them from
 CC phytopathogens, which destroy crops. In addition, the coding sequence and
 CC proteins are useful for the treatment of human infectious diseases. The
 CC present sequence is a primer used to sequence the zwittermixin A genes
 XX
 SQ Sequence 21 BP; 8 A; 4 C; 5 G; 4 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 9.4e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 802 AAAGTAATGAGAGATGTTCC 820
 DB 2 AAAGTAATGAGAGCTTCC 20
 RESULT 779
 AAA63521/C
 ID AAA63521 standard; DNA; 21 BP.
 XX
 AC AAA63521;
 XX
 DT 14-NOV-2000 (first entry)
 XX
 DE PCR primer for cDNA encoding macrophage colony stimulating factor.
 XX
 KW Macrophage colony stimulating factor; cell differentiation; leukaemia;
 KW leukaemic cell; CD14-CD15 stem cell; polymer; disaccharide unit;
 KW glucuronic acid; haematopoietic cell; aplasia; neutropenia;
 KW transducing receptor; CD44 receptor; PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200047163-A2.
 XX
 PD 17-AUG-2000.
 XX
 PF 11-FEB-2000; 2000WO-FR000349.
 XX
 PR 11-FEB-1999; 99FR-00001644.
 XX
 PA (INRM) INSERM INST NAT SANTE & RECH MEDICALE.
 XX
 PI Smadja-Joffe F, Charrad R, Chomienne C, Delpech B, Jasmin C;
 XX
 DR WPI; 2000-524479/47.
 XX
 XX Composition for inducing differentiation of leukemic or hematopoietic
 PT stem cells, useful for treating e.g. leukemia or aplasia, contains a
 PT polymer comprising specific disaccharide units.
 XX
 XX Example 1; Page 25; 57pp; French.
 PS
 XX PCR primers AAA63520-21 were used to amplify cDNA encoding macrophage
 CC colony stimulating factor. The amplified fragment is used to express the
 CC polypeptide, which is used in the method of the invention. The
 CC specification describes a method for preparing a composition for
 CC stimulating differentiation of leukemic cells or CD14-CD15 stem cells.
 CC The method uses a polymer containing disaccharide units, each comprising
 CC an N-acetyl-D-glucosamine linked thorough a beta-1,4-O-glucosidic bond to
 CC a molecule with a glucuronic acid structure. The polymers are used to
 CC treat leukaemia by inhibiting, in vivo, proliferation of leukemic cells
 CC and to regulate differentiation of very immature, but normal,
 CC haematopoietic cells, e.g. for treating aplasia or neutropenia.
 CC Haematopoietic, especially leukemic, cells, and particularly AML (acute
 CC myeloblastic leukaemia) blasts are stimulated or differentiated and stem
 CC cells are converted to mature cells of granulocytic and monocytic


```

DT 01-OCT-2001 (first entry)
XX
XX Cyanophyceae PCR primer M23.
XX
XX Cyanophyte; blue-green algae; PCR primer; ss.
XX
XX Cyanobacteria sp.
XX
XX CNI275717-A.
XX
XX 06-DEC-2000.
XX
XX 07-JUL-2000; 2000CN-00117241.
XX
XX 07-JUL-2000; 2000CN-00117241.
XX
XX (UYZH-) UNIV ZHONGSHAN.
XX
XX Chen Y, Zhou H, Qu L;
XX
XX WPI; 2001-211865/22.
XX
XX New nucleic acid molecular probe, useful for identifying blue-green alga.
XX
XX Example 1; Page 3 (Disclosure); 8pp; Chinese.
XX
XX The present invention relates to methods for identifying cyanophytes
XX (blue-green algae) using molecular probes (AAH73858-9). The probes can
XX conveniently, quickly and accurately identify cyanophyte (including
XX freshwater algae bloom cyanophyte and marine red tide cyanophyte) and
XX features accurate and automatic detection. The present sequence is a PCR
XX primer, which was used in an example from the present invention
XX
XX Sequence 21 BP; 1 A; 10 C; 3 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 14.2; DB 1; Length 21;
XX Best Local Similarity 84.2%; Pred. No. 9.4e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 1421 CAGAGGAGGAGGAGGAGCT 1439
XX ||||| ||||| |||||
XX 21 CAGAGGCGAAGAGGAGCT 3
XX
XX
XX RESULT 783
XX AAD21688
XX ID AAD21688 standard; DNA; 21 BP.
XX
XX AC AAD21688;
XX
XX DT 28-JAN-2002 (first entry)
XX
XX DE Imperfect direct repeat #3 of human RPGR exon ORF15 repetitive sequence.
XX
XX KW Human; mutation; retinitis pigmentosa GTPase regulator; RPGR; genotyping;
XX open reading frame; ORF; X-linked retinitis pigmentosa; XLRP;
XX gene therapy; screening; forensic analysis; ds.
XX
XX OS Homo sapiens.
XX
XX PN WO200177380-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 10-APR-2001; 2001WO-GB001622.
XX
XX PR 10-APR-2000; 2000GB-00008801.
XX
XX PA (MEDI-) MEDICAL RES COUNCIL.
XX
XX PI Wright A;
XX
XX DR WPI; 2001-663057/76.
XX
XX PT Diagnosing disease or predisposition to disease, associated with disease
XX causing mutations in retinitis pigmentosa GTPase regulator gene by
XX genotyping ORF15 of the gene, and determining presence of mutations.
XX
XX PS Disclosure; Fig 4E; 100pp; English.
XX
XX The present invention relates to a method for diagnosing disease or
XX predisposition to a disease, associated with a disease causing mutations
XX in a retinitis pigmentosa GTPase regulator (RPGR) gene involves
XX genotyping a RPGR gene, and determining whether the genotype comprises a
XX disease causing mutations, where the risk genotype is present within open
XX reading frame (ORF)15 of the RPGR gene. The method is useful for
XX detecting a certain disease state e.g., X-linked retinitis pigmentosa
XX (XLRP). The kit is useful for detecting and measuring disease causing
XX mutations in biological fluids and tissues and for localising mutation in
XX tissues. The mutant RPGR gene is useful in gene therapy techniques and
XX for screening agents capable of affecting the expression of the sequences
XX and/or the biological activity of mutant RPGR. They are preferably useful
XX for identifying agonists and antagonists of RPGR. The mutant RPGR gene is
XX also useful in identification of potential pharmaceutical targets in high
XX throughput screening assays and forensic analysis. The present sequence
XX is the imperfect direct repeat of human RPGR exon ORF15 repetitive DNA
XX
XX Sequence 21 BP; 7 A; 0 C; 14 G; 0 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 14.2; DB 1; Length 21;
XX Best Local Similarity 84.2%; Pred. No. 9.4e+02;
XX Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
XX
XX QY 1333 GAAGAGGAGGAGGAGGGGG 1351
XX ||||| ||||| |||||
XX 1 GAGGAGGAGGAGGAGGGGG 19
XX
XX
XX RESULT 784
XX AAD21689
XX ID AAD21689 standard; DNA; 21 BP.
XX
XX AC AAD21689;
XX
XX DT 28-JAN-2002 (first entry)
XX
XX DE Imperfect direct repeat #4 of human RPGR exon ORF15 repetitive sequence.
XX
XX KW Human; mutation; retinitis pigmentosa GTPase regulator; RPGR; genotyping;
XX open reading frame; ORF; X-linked retinitis pigmentosa; XLRP;
XX gene therapy; screening; forensic analysis; ds.
XX
XX OS Homo sapiens.
XX
XX PN WO200177380-A2.
XX
XX PD 18-OCT-2001.
XX
XX PF 10-APR-2001; 2001WO-GB001622.
XX
XX PR 10-APR-2000; 2000GB-00008801.
XX
XX PA (MEDI-) MEDICAL RES COUNCIL.
XX
XX PI Wright A;
XX
XX DR WPI; 2001-663057/76.
XX
XX PT Diagnosing disease or predisposition to disease, associated with disease
XX causing mutations in retinitis pigmentosa GTPase regulator gene by
XX genotyping ORF15 of the gene, and determining presence of mutations.
XX
XX PS Disclosure; Fig 4E; 100pp; English.
XX
XX The present invention relates to a method for diagnosing disease or
XX predisposition to a disease, associated with a disease causing mutations
XX
XX

```

CC in a retinitis pigmentosa GTPase regulator (RPGR) gene involves
 CC genotyping a RPGR gene, and determining whether the genotype comprises a
 CC disease causing mutations, where the risk genotype is present within open
 CC reading frame (ORF)15 of the RPGR gene. The method is useful for
 CC detecting a certain disease state e.g., X-linked retinitis pigmentosa
 CC (XLRP). The kit is useful for detecting and measuring disease causing
 CC mutations in biological fluids and tissues and for localising mutation in
 CC tissues. The mutant RPGR gene is useful in gene therapy techniques and
 CC for screening agents capable of affecting the expression of the sequences
 CC and/or the biological activity of mutant RPGR. They are preferably useful
 CC for identifying agonists and antagonists of RPGR. The mutant RPGR gene is
 CC also useful in identification of potential pharmaceutical targets in high
 CC throughput screening assays and forensic analysis. The present sequence
 CC is the imperfect direct repeat of human RPGR exon ORF15 repetitive DNA
 XX
 SQ Sequence 21 BP; 7 A; 0 C; 14 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 9.4e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1333 GAAGAGGAGGAGGAGGGG 1351

Db 1 GAGGAGGAGGAGGAGGGG 19

RESULT 785

AAF95586

ID AAF95586 standard; DNA; 21 BP.

XX

AC AAF95586;

XX

DT 06-JUN-2001 (first entry)

XX

DE Human gene single nucleotide polymorphism #347.

XX

KW Human; variant thrombospondin 1; variant thrombospondin 4; SNP;

KW polymorphism; vascular disease; coronary artery disease; forensics;

KW myocardial infarction; atherosclerosis; stroke; venous thromboembolism;

KW pulmonary embolism; paternity test; ds.

XX

OS Homo sapiens.

XX

FH Key Location/Qualifiers

FT Variation

FT replace(11,G)

FT /*tag= a

FT /*standard_name= "single nucleotide polymorphism"

XX WO200118250-A2.

PN

XX 15-MAR-2001.

XX

PF 07-SEP-2000; 2000WO-US024503.

XX

PR 10-SEP-1999; 99US-0153357P.

XX

PR 26-JUL-2000; 2000US-0220947P.

XX

PR 16-AUG-2000; 2000US-0225724P.

XX

PA (WHED) WHITEHEAD INST BIOMEDICAL RES.

XX

PA (MILL-) MILLENNIUM PHARM INC.

XX

PI Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, McCarthy JT;

XX

DR WPI; 2001-226749/23.

XX

PT Nucleic acids comprising single nucleotide polymorphisms, useful in

PT applications such as forensics, paternity testing, medicine, genetic

PT analysis and phenotype correlations to diseases such as diabetes and

PT atherosclerosis.

XX

PS Example; Page 73; 242pp; English.

XX

CC The present invention provides a method of diagnosing a vascular disease

CC in an individual, involving determining the sequence at various
 CC polymorphic sites within the human thrombospondin 1 and thrombospondin 4
 CC genes. The sequences at a number of polymorphic sites are also provided
 CC in the specification. In particular, the method can be used in the
 CC diagnosis of atherosclerosis, myocardial infarction, coronary heart
 CC disease, stroke, peripheral vascular diseases, venous thromboembolism and
 CC pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
 CC useful in forensics, paternity testing, genetic analysis and phenotype
 CC correlations to diseases. The present sequence is an example of one of
 CC the human gene SNPs shown in the specification
 XX

SQ Sequence 21 BP; 4 A; 8 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 9.4e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 842 AGTGTGGCTCAGACTCCCT 860

Db 1 AGTGTGACCCAGACTGCCT 19

RESULT 786

AAH62108

ID AAH62108 standard; DNA; 21 BP.

XX

AC AAH62108;

XX

DT 12-SEP-2001 (first entry)

XX

DE Neutropilin 1 (NRPI) polymorphism containing DNA fragment #9.

XX

KW Single nucleotide polymorphism; SNP; human; cancer; inflammation;

KW heart disease; paternity testing; forensic science; ds.

XX

OS Homo sapiens.

XX

FH Key Location/Qualifiers

FT Variation

FT replace(11,T)

FT /*tag= a

FT /*standard_name= "single nucleotide polymorphism"

XX WO200138576-A2.

PN

XX 31-MAY-2001.

PD

PF 17-NOV-2000; 2000WO-US031639.

XX

PR 24-NOV-1999; 99US-0167334P.

XX

PA (WHED) WHITEHEAD INST BIOMEDICAL RES.

XX

PI Cargill M, Ireland JS, Lander ES;

XX

DR WPI; 2001-367705/38.

XX

PT New nucleic acid segments of the human genome, particularly from genes

PT including polymorphic sites, for phenotype correlation, forensics,

PT paternity testing, medicine and genetic analysis.

XX

PS Claim 1; Page 29; 80pp; English.

XX

CC DNA sequences AAH62100 - AAH62688 represent segments of human genes which
 CC contain single nucleotide polymorphisms (SNPs). A method is included in
 CC the invention for analysing a nucleic acid sample, which consists of
 CC determining the base occupying any one of the polymorphic sites given in
 CC the SNP containing sequences. The nucleotide sequences can be used in the
 CC diagnosis or monitoring of diseases, such as cancer, inflammation, heart
 CC diseases, diseases of the cardiovascular system, and infection by
 CC microorganisms. The oligonucleotides are also useful in the manufacture
 CC of a medicament for the treatment or prophylaxis of the diseases, and as
 CC a pharmaceutical. SNP containing oligonucleotides are useful in
 CC applications such as phenotype correlation, forensics, paternity testing,

XX	12-JUN-2001 (first entry)	
XX	Immunostimulatory nucleic acid #695.	
XX	Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;	
XX	immunostimulatory; tumour; viral infection; bacterial infection;	
XX	fungal infection; parasitic infection; cancer; asthma;	
XX	infectious disease; allergy; immune deficiency; phosphorothioate; ss.	
XX	Synthetic.	
XX	WO200122972-A2.	
XX	05-APR-2001.	
XX	25-SEP-2000; 2000WO-US026383.	
XX	25-SEP-1999; 99US-0156113P.	
XX	27-SEP-1999; 99US-0156135P.	
XX	23-AUG-2000; 2000US-0227436P.	
XX	(IOWA) UNIV IOWA RES FOUND.	
XX	(COLE-) COLEY PHARM GMBH.	
XX	Krieg AM, Schetter C, Vollmer J;	
XX	WPI; 2001-273485/28.	
XX	Vaccinating against tumors, infectious diseases, allergies and asthma	
XX	using immunostimulatory Py-rich and TG nucleic acids.	
XX	Claim 101; Page 53; 338pp; English.	
XX	The present invention relates to a method for stimulating an immune	
XX	response. The method comprises administering an immunostimulatory nucleic	
XX	acid to a non-rodent subject in sufficient quantity to stimulate an	
XX	immune response. The present sequence is one such immunostimulatory	
XX	nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich	
XX	(py-rich) or thymidine (T) rich. The method is used to vaccinate subjects	
XX	against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae	
XX	and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,	
XX	haemophilus, campylobacter, clostridium, Escherichia coli and/or	
XX	staphylococcus), fungal antigens and/or parasitic antigens. The method is	
XX	also useful for preventing cancer, asthma, infectious disease, allergy or	
XX	immune deficiency. The present sequence can also be used to redirect a	
XX	Th2 to a Th1 immune response and to activate immune cells. Note: the	
XX	present sequence may have a phosphorothioate backbone	
XX	Sequence 21 BP; 0 A; 7 C; 7 G; 7 T; 0 U; 0 Other;	
XX	Query Match 0.7%; Score 14.2; DB 1; Length 21;	
XX	Best Local Similarity 84.2%; Pred No. 9.4e+02;	
XX	Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0	
QY	1245 CGATGAGGACGACGAC 1263	
DB		
DB	20 CGACGACGACGACGAC 2	
RESULT 790		
AA73409/C		
ID	AA73409 standard; DNA; 21 BP.	
XX	AA73409;	
XX	30-APR-2001 (first entry)	
XX	Grand fir monoterpene synthase conserved coding sequence SEQ ID NO: 62.	
XX	Monoterpene synthase; grand fir; cancer; (-)-camphene synthase;	
KW	myrcene synthase; (-)-limonene synthase; (-)-pinene synthase;	
KW	terpinolene synthase; insect resistance; nutrition; ss.	

PT acetylated pectins and plant cell walls.
XX Example 12; Col 31; 35pp; English.
XX
CC The present invention relates to *Bacillus subtilis* pectin acetyltransferase
CC protein. The invention is useful for degrading a pectic substance. It is
CC also useful for degrading soluble and insoluble pectins with varying
CC degrees of esterification, clarification etc. The protein may be used
CC alone or in combination with other enzymes for the degradation or
CC modification of acetylated pectins, degradation or modification of plant
CC cell walls
XX
XX Sequence 21 BP; 4 A; 7 C; 5 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 9.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 707 GGCTGGCAAGGCAAGTA 725
Db 21 GTGCTGGCAATGCGGTA 3
RESULT 792
AAH45291
ID AAH45291 standard; DNA; 21 BP.
XX
XX AC AAH45291;
XX
XX 07-SEP-2001 (first entry)
XX
XX HICS probe target oligonucleotide containing 4 mismatches.
DE
XX HICS; hybridisation induced chemiluminescent signal; target;
XX nucleic acid detection; nucleic acid quantification; chemiluminescence;
KW quencher; hybridisation assay; mutation detection; ss.
KW
XX Unidentified.
XX
XX WO200142497-A2.
XX
XX 14-JUN-2001.
XX
XX 11-DEC-2000; 2000WO-GB004721.
XX
XX 10-DEC-1999; 99GB-00029148.
XX
XX (MOLE-) MOLECULAR LIGHT TECHNOLOGY RES LTD.
XX
XX Rutter AJ, Weeks I, Li Z, Smith K;
XX
XX WPI; 2001-381707/40.
XX
XX Detecting and quantifying target nucleic acid sequence in a sample, by
XX contacting a sample with an oligonucleotide sequence labeled with
XX chemiluminescent and quencher molecules, and monitoring chemiluminescent
XX emission.
XX
XX Example 7; Page 45; 58pp; English.
XX
XX The invention relates to a method for detecting and/or quantifying a
XX target nucleic acid sequence in a sample. The method involves contacting
XX the sample with an oligonucleotide probe that binds to the target and is
XX labelled with a chemiluminescent molecule and a quencher molecule. In the
XX non-hybridised state the chemiluminescent label is in sufficiently close
XX proximity to the quencher that the chemiluminescent emission is
XX attenuated. However, when the probe hybridises to the target, there is
XX little or no attenuation. The method is useful in nucleic acid
XX hybridisation assays, and in a wide range of applications including
XX detection of viruses and blood samples, measurement of hormone levels,
XX detection of genetic mutation and reduction of contaminants in the
XX environment. The method provides a simple means of optical coupling which
XX is capable of demonstrating greater sensitivity than is achievable using
XX greater sensitivity of detection than the measurement of fluorescence

CC fluorescence quenching. Measurement of chemiluminescence emission offers
CC greater sensitivity of detection than the measurement of fluorescence
CC emission. The method is suitable for discriminating target sequences
CC which may be substantially the same but differ from each other by as
CC little as one nucleotide. The present sequence is a target sequence which
CC is complementary to a hybridisation induced chemiluminescent signal
CC (HICS) probe except for one mismatch. It was used in an example
CC demonstrating the analysis of mismatched base pairs using a
CC chemiluminescence/quencher-labelled oligonucleotide probe
XX
XX Sequence 21 BP; 9 A; 5 C; 4 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 9.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1383 CAAGACAGTCAAACACAG 1401
Db 2 CAAGTGACTCAAAACACGCG 20
RESULT 793
AAH45292
ID AAH45292 standard; DNA; 21 BP.
XX
XX AC AAH45292;
XX
XX 07-SEP-2001 (first entry)
XX
XX HICS probe target oligonucleotide containing 6 mismatches.
DE
XX HICS; hybridisation induced chemiluminescent signal; target;
XX nucleic acid detection; nucleic acid quantification; chemiluminescence;
KW quencher; hybridisation assay; mutation detection; ss.
KW
XX Unidentified.
XX
XX WO200142497-A2.
XX
XX 14-JUN-2001.
XX
XX 11-DEC-2000; 2000WO-GB004721.
XX
XX 10-DEC-1999; 99GB-00029148.
XX
XX (MOLE-) MOLECULAR LIGHT TECHNOLOGY RES LTD.
XX
XX Rutter AJ, Weeks I, Li Z, Smith K;
XX
XX WPI; 2001-381707/40.
XX
XX Detecting and quantifying target nucleic acid sequence in a sample, by
XX contacting a sample with an oligonucleotide sequence labeled with
XX chemiluminescent and quencher molecules, and monitoring chemiluminescent
XX emission.
XX
XX Example 7; Page 45; 58pp; English.
XX
XX The invention relates to a method for detecting and/or quantifying a
XX target nucleic acid sequence in a sample. The method involves contacting
XX the sample with an oligonucleotide probe that binds to the target and is
XX labelled with a chemiluminescent molecule and a quencher molecule. In the
XX non-hybridised state the chemiluminescent label is in sufficiently close
XX proximity to the quencher that the chemiluminescent emission is
XX attenuated. However, when the probe hybridises to the target, there is
XX little or no attenuation. The method is useful in nucleic acid
XX hybridisation assays, and in a wide range of applications including
XX detection of viruses and blood samples, measurement of hormone levels,
XX detection of genetic mutation and reduction of contaminants in the
XX environment. The method provides a simple means of optical coupling which
XX is capable of demonstrating greater sensitivity than is achievable using
XX greater sensitivity of detection than the measurement of fluorescence

Query Match 0.7%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 9.4e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1235 AGGAGAGTGGCGATGAGGA 1253
 |||||
 DB 21 AGGAGAGTGGACACAGGGA 3

RESULT 796
 ABK65829
 ID ABK65829 standard; DNA; 21 BP.
 AC ABK65829;
 XX
 DT 02-JUL-2002 (first entry)
 DE Human single nucleotide polymorphism #449.

XX Human; single nucleotide polymorphism; SNP; sickle cell anaemia;
 KW agammaglobulinaemia; diabetes insipidus; Lesch-Nyhan syndrome;
 KW muscular dystrophy; Wiskott-Aldrich syndrome; Fabry's disease;
 KW familial hypercholesterolaemia; polycystic kidney disease; cancer;
 KW hereditary spherocytosis; Von Willebrand's disease; tuberous sclerosis;
 KW hereditary haemorrhagic telangiectasia; familial colonic polyposis;
 KW Ehlers-Danlos syndrome; osteogenesis imperfecta; autoimmune disease;
 KW acute intermittent porphyria; inflammation; nervous system disorder;
 KW infection; rheumatoid arthritis; multiple sclerosis; diabetes;
 KW systemic lupus erythematosus; Graves disease; longevity; obesity;
 KW baldness; fertility; forensic; paternity testing; ss.
 XX Homo sapiens.
 OS
 XX
 XX US2002037508-A1.
 XX
 PD 28-MAR-2002.
 XX
 XX 18-JAN-2001; 2001US-00765081.
 XX
 XX 19-JAN-2000; 2000US-0176861P.
 XX
 XX (CARG// CARGILL M.
 PA (IREL// IRELAND J S.
 PA (LAND// LANDER E S.
 XX
 XX Cargill M, Ireland JS, Lander ES;
 PI
 XX WPI; 2002-315108/35.
 XX
 XX Nucleic acid comprising single nucleotide polymorphisms, useful in
 PT forensics, paternity testing and diagnosis of disease.
 XX
 XX Claim 1; Page 93; 96pp; English.

XX The invention relates to a nucleic acid comprising single nucleotide
 CC polymorphisms (SNPs) associated with diseases. The nucleic acids
 CC comprising the SNPs and probes and primers for detecting them may be used
 CC in assays for the diagnosis of diseases associated with SNPs (such as
 CC sickle cell anaemia, agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan
 CC syndrome, muscular dystrophy, Wiskott-Aldrich syndrome, Fabry's disease,
 CC familial hypercholesterolaemia, polycystic kidney disease, hereditary
 CC spherocytosis, Von Willebrand's disease, tuberous sclerosis, hereditary
 CC haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos
 CC syndrome, osteogenesis imperfecta, and acute intermittent porphyria,
 CC symptoms of, or susceptibility to, multifactorial diseases of which a
 CC component is or may be genetic, such as autoimmune diseases,
 CC inflammation, cancer, diseases of the nervous system, and infection by
 CC pathogenic microorganisms, autoimmune diseases including rheumatoid
 CC arthritis, multiple sclerosis, diabetes (insulin-dependent and non-
 CC independent), systemic lupus erythematosus and Graves disease, cancers
 CC including cancers of the bladder, brain, breast, colon, oesophagus,
 CC kidney, leukaemia, liver, lung, oral cavity, ovary, pancreas, prostate,
 CC skin, stomach and uterus, longevity, appearance (e.g., baldness,

CC obesity), strength, speed, endurance, fertility, and susceptibility or
 CC receptivity to particular drugs or therapeutic treatments), in forensics
 CC and in paternity testing. ABK65381-ABK65841 represent human single
 CC nucleotide polymorphisms of the invention

XX
 SQ Sequence 21 BP; 1 A; 6 C; 7 G; 6 T; 0 U; 1 Other;
 {Query Match 0.7%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 76.2%; Pred. No. 9.4e+02;
 Matches 16; Conservative 1; Mismatches 4; Indels 0; Gaps 0;

QY 1503 GTTGGCTGTAATGACCTCTC 1523
 |||||
 DB 1 GTTGGCTGTGTGGACCCGC 21

RESULT 797
 ABK65627
 ID ABK65627 standard; DNA; 21 BP.
 AC ABK65627;
 XX
 DT 02-JUL-2002 (first entry)
 DE Human single nucleotide polymorphism #247.

XX Human; single nucleotide polymorphism; SNP; sickle cell anaemia;
 KW agammaglobulinaemia; diabetes insipidus; Lesch-Nyhan syndrome;
 KW muscular dystrophy; Wiskott-Aldrich syndrome; Fabry's disease;
 KW familial hypercholesterolaemia; polycystic kidney disease; cancer;
 KW hereditary spherocytosis; Von Willebrand's disease; tuberous sclerosis;
 KW hereditary haemorrhagic telangiectasia; familial colonic polyposis;
 KW Ehlers-Danlos syndrome; osteogenesis imperfecta; autoimmune disease;
 KW acute intermittent porphyria; inflammation; nervous system disorder;
 KW infection; rheumatoid arthritis; multiple sclerosis; diabetes;
 KW systemic lupus erythematosus; Graves disease; longevity; obesity;
 KW baldness; fertility; forensic; paternity testing; ss.
 XX Homo sapiens.
 OS
 XX
 XX US2002037508-A1.
 XX
 PD 28-MAR-2002.
 XX
 XX 18-JAN-2001; 2001US-00765081.
 XX
 XX 19-JAN-2000; 2000US-0176861P.
 XX
 XX (CARG// CARGILL M.
 PA (IREL// IRELAND J S.
 PA (LAND// LANDER E S.
 XX
 XX Cargill M, Ireland JS, Lander ES;
 PI
 XX WPI; 2002-315108/35.
 XX
 XX Nucleic acid comprising single nucleotide polymorphisms, useful in
 PT forensics, paternity testing and diagnosis of disease.
 XX
 XX Claim 1; Page 66; 96pp; English.

XX The invention relates to a nucleic acid comprising single nucleotide
 CC polymorphisms (SNPs) associated with diseases. The nucleic acids
 CC comprising the SNPs and probes and primers for detecting them may be used
 CC in assays for the diagnosis of diseases associated with SNPs (such as
 CC sickle cell anaemia, agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan
 CC syndrome, muscular dystrophy, Wiskott-Aldrich syndrome, Fabry's disease,
 CC familial hypercholesterolaemia, polycystic kidney disease, hereditary
 CC spherocytosis, Von Willebrand's disease, tuberous sclerosis, hereditary
 CC haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos
 CC syndrome, osteogenesis imperfecta, and acute intermittent porphyria,
 CC symptoms of, or susceptibility to, multifactorial diseases of which a
 CC component is or may be genetic, such as autoimmune diseases,
 CC inflammation, cancer, diseases of the nervous system, and infection by
 CC pathogenic microorganisms, autoimmune diseases including rheumatoid
 CC arthritis, multiple sclerosis, diabetes (insulin-dependent and non-
 CC independent), systemic lupus erythematosus and Graves disease, cancers
 CC including cancers of the bladder, brain, breast, colon, oesophagus,
 CC kidney, leukaemia, liver, lung, oral cavity, ovary, pancreas, prostate,
 CC skin, stomach and uterus, longevity, appearance (e.g., baldness,

CC inflammation, cancer, diseases of the nervous system, and infection by
 CC pathogenic microorganisms, autoimmune diseases including rheumatoid
 CC arthritis, multiple sclerosis, diabetes (insulin-dependent and non-
 CC independent), systemic lupus erythematosus and Graves disease, cancers
 CC including cancers of the bladder, brain, breast, colon, oesophagus,
 CC kidney, leukaemia, liver, lung, oral cavity, ovary, pancreas, prostate,
 CC skin, stomach and uterus, longevity, appearance (e.g., baldness,
 CC obesity), strength, speed, endurance, fertility, and susceptibility or
 CC receptivity to particular drugs or therapeutic treatments), in forensics
 CC and in paternity testing. ABK65381-ABK65841 represent human single
 CC nucleotide polymorphisms of the invention
 XX
 SQ Sequence 21 BP; 11 A; 2 C; 7 G; 0 T; 0 U; 1 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 76.2%; Pred. No. 9.4e+02;
 Matches 16; Conservative 1; Mismatches 4; Indels 0; Gaps 0;

QY 1396 ACAGAGGATGAAAGAGAGAAA 1416
 ||||| :|| :|| :|| :||
 DB 1 ACAGAGGACARAGGGAGAAA 21

RESULT 798
 ABK92284/c
 ID ABK92284 standard; DNA; 21 BP.

XX AC ABK92284;

XX 23-AUG-2002 (first entry)

XX Human tumour suppressor gene-specific primer #16.

XX Human; tumour suppressor gene; neuroblastoma; primer; ss; meningioma;
 KW colorectal cancer; gastric carcinoma; breast cancer; gene therapy;
 KW cytostatic; GenomeWalker adaptor.

XX Homo sapiens.

XX WO200226815-A2.

XX 04-APR-2002.

XX 27-SEP-2001; 2001WO-EP011199.

XX 27-SEP-2000; 2000EP-00870219.

XX (VLAA-) VLAAMS INTERUNIVERSITAIR INST BIOTECHNOG.

XX Van Roy F, Speleman F;

XX WPI; 2002-471260/50.

XX Novel tumor suppressor gene product useful for diagnosing or predicting
 PT the development of cancer, and for manufacturing medicaments for treating
 PT cancer such as neuroblastoma, meningioma and breast cancer.

XX Example; Page 45; 352pp; English.

XX The invention relates to an isolated tumour suppressor gene and its
 CC protein product. The polynucleotides and proteins of the invention are
 CC useful for the manufacture of a medicament to treat cancer such as
 CC neuroblastoma, meningioma, colorectal cancer, gastric carcinoma and/or
 CC breast cancer, for generating micronuclei and/or for removing amplified
 CC DNA, for the isolation of an interacting compound, and for production of
 CC an antibody. The sequences are also useful for diagnosing cancer.
 CC predicting the likelihood of developing cancer, and in gene therapy to
 CC restore the defective function of the tumour suppressor gene. This
 CC sequence represents an oligonucleotide used in the isolation of human
 CC tumour suppressor genes of the invention

XX Sequence 21 BP; 1 A; 8 C; 4 G; 8 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 9.4e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1461 GGAGGAGAGCCAGAGGCC 1479
 ||||| :|| :|| :|| :||
 DB 19 GGAGGAGAAACAGGAGGCC 1

RESULT 799
 ABS78295/c
 ID ABS78295 standard; DNA; 21 BP.

XX AC ABS78295;

XX 13-DEC-2002 (first entry)

XX Angiogenesis inhibitory oligonucleotide #779.

XX Angiogenesis inhibitor; ss; angiogenesis; solid tumour growth;
 KW tumour metastasis; precancerous lesion; rheumatoid arthritis; psoriasis;
 KW diabetic retinopathy; retinopathy of prematurity; macular degeneration;
 KW corneal graft rejection; neovascular glaucoma; retrolental fibroplasia;
 KW rubecosis; Osler-Webber Syndrome; myocardial angiogenesis;
 KW plaque neovascularisation; telangiectasia; haemophilic joint;
 KW angiofibroma; wound granulation; intestinal adhesion; atherosclerosis;
 KW scleroderma; hypertrophic scar.

XX Synthetic.

XX WO200253141-A2.

XX 11-JUL-2002.

XX 14-DEC-2001; 2001WO-US048458.

XX 14-DEC-2000; 2000US-0255534P.

XX (COLE-) COLEY PHARM GROUP INC.

XX Bratzler RL;

XX WPI; 2002-566690/50.

XX Inhibiting angiogenesis in a subject, involves administering at least one
 PT antiangiogenic nucleic acid molecule to the subject.

XX Claim 2; Page 33; 276pp; English.

XX The invention relates to inhibiting angiogenesis in a subject, comprising
 CC administering at least one antiangiogenic nucleic acid molecule. Also
 CC included is a kit comprising a first container housing the antiangiogenic
 CC nucleic acids, and instructions for administering them to a subject
 CC having a condition characterised by unwanted angiogenesis. The method is
 CC useful for inhibiting angiogenesis associated with solid tumour growth,
 CC tumour metastasis, precancerous lesion, rheumatoid arthritis, psoriasis,
 CC diabetic retinopathy, retinopathy of prematurity, macular degeneration,
 CC corneal graft rejection, neovascular glaucoma, retrolental fibroplasia,
 CC rubecosis, Osler-Webber Syndrome, myocardial angiogenesis, plaque
 CC neovascularisation, telangiectasia, haemophilic joints, angiofibroma,
 CC wound granulation, intestinal adhesions, atherosclerosis, scleroderma and
 CC hypertrophic scars. The present sequence is an antiangiogenic nucleic
 CC acid of the invention

SQ Sequence 21 BP; 0 A; 7 C; 7 G; 7 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 9.4e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1245 CGATGAGGACGAGAGCAGAC 1263
 ||||| :|| :|| :|| :||
 DB 20 CGACGACGAGCAGAGCAGAC 2

CC hypertension, heart failure, myocardial infarction, ventricular
 CC hypertrophy, vascular diseases, aneurysm, embolism, thrombosis, coronary
 CC artery disease, arteriosclerosis and/or atherosclerosis, and
 CC hypersensitivity reactions, sepsis, autoimmune diseases, inflammatory
 CC arthritis, cancer, wounds, viral, bacterial or fungal infection, Chronic
 CC obstructive pulmonary disease (COPD) and enterocolitis (many other
 CC diseases and disorders are listed in the specification). The
 CC polynucleotides are also useful for chromosome identification. Antibodies
 CC against the proteins may be utilised for immunophenotyping of cell lines
 CC and biological samples. The present sequence is included in the sequence
 CC listing but is not referred to anywhere else in the specification
 XX
 SQ Sequence 21 BP; 5 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 9.4e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 997 AGGACATATGACAGCTG 1015
 Db ||||| ||||| ||||| |||||
 19 AGGACTTGTGACACAGCTG 1

RESULT 802
 ABS60585/c
 ID ABS60585 standard; DNA; 21 BP.
 AC ABS60585;
 XX
 DT 05-NOV-2002 (first entry)
 DE Human polymorphism associated DNA sequence #334.

XX Aminopeptidase P; XPNP2; bradykinin receptor B1; ds; BDKRB1;
 KW tachykinin receptor B1; TACR1; Cl esterase inhibitor; C1NH; kallikrein 1;
 KW KUK1; bradykinin receptor B2; BDKRB2; gene therapy;
 KW angiotensin converting enzyme 2; ACE2; protease inhibitor 4; PI4;
 KW polymorphism; haemangioma; tumour; sarcoma; Crohn's disease; trachoma;
 KW cardiovascular disease; angina pectoris; hypertension; heart failure;
 KW myocardial infarction; ventricular hypertrophy; vascular disease;
 KW aneurysm; embolism; thrombosis; coronary artery disease; angioedema;
 KW arteriosclerosis; atherosclerosis; hypersensitivity; sepsis;
 KW autoimmune disease; inflammatory arthritis; cancer; wound;
 KW viral infection; bacterial infection; fungal infection; COPD;
 KW Chronic obstructive pulmonary disease; enterocolitis.
 XX
 OS Homo sapiens.
 PN WO200261131-A2.
 XX
 PD 08-AUG-2002.
 XX
 PF 03-DEC-2001; 2001WO-US047235.
 XX
 PR 04-DEC-2000; 2000US-0251015P.
 PR 23-JAN-2001; 2001US-0263678P.
 PR 02-MAR-2001; 2001US-0273037P.
 XX
 XX (BRIM) BRISTOL-MYERS SQUIBB CO.
 PA (TSUC/) TSUCHIHASHI Z.
 PA (HUIL/) HUI L.
 XX
 XX Tsuchihashi Z, Hui L, Zerba KE, Ma-Edmonds M, Perrone MH;
 PI Swanson BN, Powell JR;
 XX
 XX WPI; 2002-619265/66.
 DR
 XX New isolated nucleic acid with at least one polymorphic position, useful
 PT for detecting, diagnosing and treating disorders such as angioedema,
 PT cancer, viral, bacterial or fungal infection, cardiovascular and
 PT autoimmune diseases.
 XX
 PS Disclosure; Page 810; 977pp; English.

XX The invention relates to an isolated nucleic acid from a human gene
 CC encoding aminopeptidase P (XPNP2), bradykinin receptor B1 (BDKRB1),
 CC tachykinin receptor B1 (TACR1), Cl esterase inhibitor (C1NH), kallikrein
 CC 1 (KUK1), bradykinin receptor B2 (BDKRB2), angiotensin converting enzyme
 CC 2 (ACE2) or protease inhibitor 4 (PI4), comprising at least one
 CC polymorphic position. Also included are (1) a probe that hybridises to a
 CC polymorphic position as provided in the detailed summary of single
 CC nucleotide polymorphisms comprising additional 5' and 3' flanking genomic
 CC sequence; (2) analysing (M1) at least one nucleic acid sample comprising
 CC nucleic acid sequence from one or more individuals and determining the
 CC encoding a protein selected from the group above; (3) constructing (M2)
 CC haplotypes using the genes comprising grouping at least two nucleic acids
 CC upon administration of an ACE inhibitor and/or vasoconstrictor inhibitor
 CC using the polymorphic data; (5) a library of nucleic acids, each of which
 CC comprises one or more polymorphic positions within a gene encoding a
 CC human protein selected from the group above; and (6) genotyping (M4) an
 CC individual comprising obtaining a nucleic acid sample, determining the
 CC nucleotide present in at least one polymorphic position, and comparing at
 CC least one position with a known data set. The genes, (M1, M2, M3 and M4)
 CC and compositions are useful for detecting, diagnosing, treating,
 CC preventing various disorders such as angioedema and diseases which
 CC involve angiogenesis like haemangiomas, tumours, sarcomas, Crohn's
 CC disease, trachomas, and cardiovascular diseases like angina pectoris,
 CC hypertension, heart failure, myocardial infarction, ventricular
 CC hypertrophy, vascular diseases, aneurysm, embolism, thrombosis, coronary
 CC artery disease, arteriosclerosis and/or atherosclerosis, and
 CC hypersensitivity reactions, sepsis, autoimmune diseases, inflammatory
 CC arthritis, cancer, wounds, viral, bacterial or fungal infection, Chronic
 CC obstructive pulmonary disease (COPD) and enterocolitis (many other
 CC diseases and disorders are listed in the specification). The
 CC polynucleotides are also useful for chromosome identification. Antibodies
 CC against the proteins may be utilised for immunophenotyping of cell lines
 CC and biological samples. The present sequence is included in the sequence
 CC listing but is not referred to anywhere else in the specification
 XX
 SQ Sequence 21 BP; 5 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 9.4e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 997 AGGACATATGACAGCTG 1015
 Db ||||| ||||| ||||| |||||
 19 AGGACTTGTGACACAGCTG 1

RESULT 803
 ABS60586/c
 ID ABS60586 standard; DNA; 21 BP.
 XX
 AC ABS60586;
 XX
 DT 05-NOV-2002 (first entry)
 XX
 DE Human polymorphism associated DNA sequence #335.

XX Aminopeptidase P; XPNP2; bradykinin receptor B1; ds; BDKRB1;
 KW tachykinin receptor B1; TACR1; Cl esterase inhibitor; C1NH; kallikrein 1;
 KW KUK1; bradykinin receptor B2; BDKRB2; gene therapy;
 KW angiotensin converting enzyme 2; ACE2; protease inhibitor 4; PI4;
 KW polymorphism; haemangioma; tumour; sarcoma; Crohn's disease; trachoma;
 KW cardiovascular disease; angina pectoris; hypertension; heart failure;
 KW myocardial infarction; ventricular hypertrophy; vascular disease;
 KW aneurysm; embolism; thrombosis; coronary artery disease; angioedema;
 KW arteriosclerosis; atherosclerosis; hypersensitivity; sepsis;
 KW autoimmune disease; inflammatory arthritis; cancer; wound;
 KW viral infection; bacterial infection; fungal infection; COPD;
 KW Chronic obstructive pulmonary disease; enterocolitis.
 XX
 OS Homo sapiens.

DT 11-APR-2002 (first entry)
XX Human chromosome 1p36-35 PCR primer SEQ ID NO:919.
DE
XX
XX Human chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
KW PCR primer; ss.
XX
XX Homo sapiens.
OS
XX JP2001321190-A.
PN
XX
PD 20-NOV-2001.
XX
PF 12-MAR-2001; 2001JP-00068285.
XX
PR 10-MAR-2000; 2000JP-00066716.
XX
XX (RIKA) RIKAGAKU KENKYUSHO.
PA (GENO-) GENOTEX YG.
XX
XX WPI; 2002-144136/19.
DR
XX
XX Arraying genome clones.
PT
XX
PS Claim 4; Page 23; 528pp; Japanese.
XX
XX The present invention describes a method of arraying genome clones. The
CC method comprises: (a) clones of the genomic libraries contained in
CC multiwell plates numbered for discrimination are mixed in each of the
CC multiwell plates; (b) a primer designed based on the chromosome marker
CC sequence is added to the mixture to carry out an amplification reaction;
CC (c) a signal corresponding to the marker is detected from the resultant
CC amplified product to specify the discrimination Nos. of the multiwell
CC plates containing the clones having said marker sequence; (d) the order
CC of the markers is changed so that the same discrimination Nos. succeed to
CC the maximum in the specified discrimination Nos. to array the multiwell
CC plates; (e) the clones in the multiwell plates of the specified
CC discrimination Nos. are mixed respectively in each wells of longitudinal
CC and lateral directions; (f) the mixed clones are cultured and the
CC resultant cultures are amplified by using the above primer; (g) signals
CC are detected from the amplified products; (h) the clones in the multiwell
CC plates are specified from the detected result; and (i) the clones are
CC reconstituted as the positions on the chromosome and arrayed. The
CC microarray is useful for gene analysis. ABL42957 to ABL45322 represent
CC PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634
CC represent PCR primers for human chromosome 21q22.1, which are
CC specifically claimed for use in the present invention
XX
SQ Sequence 21 BP; 4 A; 6 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred.No.9.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1206 GCAGGCGATTCCTGAGGAC 1224
Db ||||| ||||| ||||| ||||| |||||
21 GCAGGACATTCATGAGGAC 3

RESULT 806
ABX09618/c
ID ABX09618 standard; DNA; 21 BP.
XX
XX AC ABX09618;
XX
DT 22-JAN-2003 (first entry)
XX
XX Arteriosclerosis-detecting probe from PALL.
XX
XX Arteriosclerosis; diagnosis; hybridisation; synergism; gene therapy;
KW mutation; probe; ss.
XX
XX Homo sapiens.

XX WO200272882-A2.
PN
XX
XX 19-SEP-2002.
PD
XX
XX 13-MAR-2002; 2002WO-EP002780.
PF
XX
XX 13-MAR-2001; 2001DE-01011925.
PR
XX
XX (OGHA-) OGHAM GMBH.
PA
XX
XX Cullen P, Seedorf U;
PI
XX
XX WPI; 2002-723374/78.
DR
XX
XX Determining genetic risk of arteriosclerosis, for clinical diagnosis,
PT comprises hybridizing patient nucleic acid with an array of probes
PT derived from risk-associated reference genes and their mutations.
XX
XX Example 1; Page 131; 146pp; German.
PS
XX
XX This invention describes a novel method for determining the genetic risk
CC of arteriosclerosis both for clinical diagnosis and for population
CC studies. The method comprises: (i) selecting risk-associated reference
CC nucleic acid sequences, including their functionally characterizing
CC mutations; (ii) applying probes from these sequences, or their
CC complements, to a carrier; (iii) hybridising the probes with a nucleic
CC acid from (or synthesised from) a patient sample; and (iv) detecting and
CC evaluating the hybridisation pattern. The method provides a quick,
CC inexpensive and informative diagnosis, and makes possible a
CC multifactorial analysis for detecting e.g. synergism between different
CC mutations or mutations that when present alone carry no risk but are risk
CC associated in presence of other mutations. The results may be combined
CC with known risk-assessment methods to provide a more reliable diagnosis,
CC especially important with new therapeutic methods (e.g. gene therapy)
CC that are directed against specific genes. All relevant mutations in a
CC reference sequence can be screened for in a single test and the method is
CC well suited to automation. ABX09147-ABX09676 represent probes used to
CC illustrate the method of the invention
XX
SQ Sequence 21 BP; 4 A; 5 C; 10 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred.No.9.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1539 GCTGAGTCCCTCAGCTTC 1557
Db ||||| ||||| ||||| ||||| |||||
20 GCTGACTCCCCACGTC 2

RESULT 807
ABK12845
ID ABK12845 standard; DNA; 21 BP.
XX
XX AC ABK12845;
XX
DT 18-JUN-2002 (first entry)
XX
XX 5' SST forward PCR primer.
DE
XX
XX ss; primer; cap binding protein; cellulose-binding activity;
KW cap affinity support; Ssr; short sequence tag; promoter identification;
KW gene therapy.
XX
XX OS Synthetic.
XX
XX WO200218415-A1.
PN
XX
XX 07-MAR-2002.
PD
XX
XX 27-AUG-2001; 2001WO-US026509.
PF
XX

KW Parkinson's disease; Huntington's disease; cancer; fertility; diabetes;
 KW adult respiratory distress syndrome; infection; tissue typing;
 KW forensic identification; gene; PCR; primer; ss.
 XX Homo sapiens.
 XX W0200290500-A2.
 XX 14-NOV-2002.
 XX 02-MAY-2002; 2002WO-US014256.
 XX 03-MAY-2001; 2001US-0288395P.
 XX 07-MAY-2001; 2001US-0289087P.
 XX 08-MAY-2001; 2001US-0289619P.
 XX 09-MAY-2001; 2001US-0289817P.
 XX 09-MAY-2001; 2001US-0289818P.
 XX 11-MAY-2001; 2001US-0290194P.
 XX 14-MAY-2001; 2001US-0290753P.
 XX 15-MAY-2001; 2001US-0291189P.
 XX 21-MAY-2001; 2001US-0292374P.
 XX 23-MAY-2001; 2001US-0293107P.
 XX 25-MAY-2001; 2001US-0293747P.
 XX 29-MAY-2001; 2001US-0294110P.
 XX 30-MAY-2001; 2001US-0294434P.
 XX 10-SEP-2001; 2001US-0318346P.
 XX 17-SEP-2001; 2001US-0322646P.
 XX 01-MAY-2002; 2002US-00136728.
 XX (CURA-) CURAGEN CORP.
 XX Spytek KA, Li L, Edinger SR, Stone DJ, Guo X, Anderson DW;
 PI Patturajan M, Gerlach VL, Taupier RJ, Pena CEA, Padigaru M;
 PI Kekuda R, Gorman L, Zerhusen BD, Smithson G, Macdougall JR;
 PI Mezes PS, Peyman JA, Zhong M;
 DR WPI; 2003-103511/09.
 XX New NOVX polypeptides and polynucleotides useful for treating or
 PT preventing e.g. congenital adrenal hyperplasia, hemophilia,
 PT hypercoagulation, autoimmune disease, allergies, immunodeficiencies,
 PT transplantation.
 XX Example B; Page 201; 300pp; English.
 XX The invention describes an isolated polypeptide, NOVX, comprising a
 CC sequence or a mature form of one of 21 51-1543 residue amino acid
 CC sequences (P1-P21), given in the specification. The NOVX polypeptides,
 CC polynucleotides and antibodies are useful in the manufacture of a
 CC medicament for treating or preventing e.g. adrenoleukodystrophy,
 CC congenital adrenal hyperplasia, haemophilia, hypercoagulation, autoimmune
 CC disease, allergies, immunodeficiencies, transplantation, Von Hippel-
 CC Lindau syndrome, Alzheimer's disease, stroke, tuberculous sclerosis,
 CC hypercalcaemia, Parkinson's disease, Huntington's disease, cancer,
 CC fertility, diabetes, adult respiratory distress syndrome, viral,
 CC bacterial and parasitic infections. The nucleic acid sequences may be
 CC used in chromosome mapping, identifying individual from minute biological
 CC samples (tissue typing), and in forensic identification of a biological
 CC sample. This sequence represents a primer used to isolate DNA encoding a
 CC novel human protein (NOV)

Sequence 21 BP; 1 A; 5 C; 6 G; 9 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 9.4e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1433 AAGAAGTCACCAAGAGGA 1451
 |||||
 Db 20 AAGAAGTCACCAAGAGGA 2

RESULT 810
 ACH03117/c
 ID ACH03117 standard; DNA; 21 BP.

ABX74978/c
 ID ABX74978 standard; DNA; 21 BP.
 XX AC ABX74978;
 XX DT 25-MAR-2003 (first entry)
 XX DE Human gene 216 polymorphism detection PCR primer #35.
 XX KW Human; mouse; ss; primer; gene 216; antiasthmatic; antiinflammatory;
 KW anorectic; chromosome 20p13-p12; single nucleotide polymorphism; SNP;
 KW gene therapy; respiratory disease; asthma; obesity; PCR;
 KW bronchial hyper-responsiveness; chronic obstructive pulmonary disease;
 KW adult respiratory distress syndrome; inflammatory bowel syndrome.
 XX OS Homo sapiens.
 XX PN W0200283077-A2.
 XX PD 24-OCT-2002.
 XX PF 15-APR-2002; 2002WO-US012063.
 XX PR 13-APR-2001; 2001US-00834597.
 XX PR 13-APR-2001; 2001WO-US012245.
 XX PA (SCHE) SCHERING CORP.
 XX PA (GENO-) GENOME THERAPEUTICS CORP.
 XX PI Keith T, Little RD, Van Eerdewegh P, Dupuis J, Del Mastro RG;
 PI Simon J, Allen K, Pandit S;
 DR WPI; 2003-092960/08.
 XX New isolated gene 216 nucleic acids, useful for diagnosing, preventing or
 PT treating a disorder, such as asthma, bronchial hyper-responsiveness,
 PT chronic obstructive pulmonary disease, obesity or inflammatory bowel
 PT syndrome.
 XX Example 10; Page 155; 650pp; English.
 XX This invention relates to a novel isolated nucleic acid, gene 216,
 CC identified from human chromosome 20p13-p12. The invention also discloses
 CC regions of the 216 gene that contain single nucleotide polymorphisms
 CC (SNP's) which may be used as markers for disease susceptibility or
 CC severity. The nucleotides of the invention may have antiasthmatic,
 CC antiinflammatory or anorectic activities and may be used in gene therapy.
 CC The nucleic acids, antibodies or its fragments are useful for diagnosing,
 CC preventing or treating a disorder, such as respiratory diseases (e.g.
 CC asthma, bronchial hyper-responsiveness, chronic obstructive pulmonary
 CC disease or adult respiratory distress syndrome), obesity, or inflammatory
 CC bowel syndrome. The nucleic acids are also useful for identifying
 CC increased susceptibility of a subject to the disorders mentioned. The
 CC nucleic acids can also be used as primers and templates for the
 CC recombinant production of disorder-associated peptides or polypeptides,
 CC for chromosome and gene mapping, or for tissue distribution studies. The
 CC present sequence represents a gene 216 specific PCR primer used in the
 CC scope of the invention

Sequence 21 BP; 1 A; 10 C; 2 G; 8 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 9.4e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

QY 1235 AGGAGAGTGGCGATGAGGA 1253
 |||||
 Db 21 AGGAGAGTGGCGATGAGGA 3

RESULT 811
 ACH03117/c
 ID ACH03117 standard; DNA; 21 BP.

XX AC ACH03117;
 XX DT 25-SEP-2003 (first entry)
 XX DE Immunostimulatory nucleic acid #752.
 XX DE Immunostimulatory; antiinflammatory; dermatological; antipsoriatic;
 KW antitumor; gene therapy; vaccine; non-allergic inflammatory disease;
 KW psoriasis; eczema; allergic contact dermatitis; latex dermatitis;
 KW inflammatory bowel disease; ulcerative colitis; Crohn's disease; ss.
 XX OS Synthetic.
 XX OS US2003050268-A1.
 XX PN 13-MAR-2003.
 XX PF 29-MAR-2002; 2002US-00112653.
 XX PR 29-MAR-2001; 2001US-0279642P.
 XX PA (KRIE/) KRIEG A M.
 XX PA (BERG/) BERG D J.
 XX PI Krieg AM, Berg DJ;
 XX DR WPI; 2003-521815/49.
 XX PT Treating non-allergic inflammatory diseases, such as psoriasis, eczema,
 PT allergic contact dermatitis, latex dermatitis or inflammatory bowel
 PT disease by administering an immunostimulatory nucleic acid.
 XX PS Disclosure; Page 29; 229pp; English.
 XX CC The invention describes a method of treating non-allergic inflammatory
 CC disease comprising administering to a subject having or at risk of
 CC developing a non-allergic inflammatory disease an immunostimulatory
 CC nucleic acid for prevention or treatment of the disease. The method is
 CC useful for treating non-allergic inflammatory diseases, such as
 CC psoriasis, eczema, allergic contact dermatitis, latex dermatitis or
 CC inflammatory bowel disease e.g., ulcerative colitis or Crohn's disease.
 CC This sequence represents an immunostimulatory nucleic acid
 XX SQ Sequence 21 BP; 0 A; 7 C; 7 G; 7 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. NO. 9.4e-02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1245 CGATGAGGACGACGACGAC 1263
 DB 20 CGACGACGACGACGACGAC 2
 RESULT 812
 ADB37081/c
 ID ADB37081 standard; DNA; 21 BP.
 XX AC ADB37081;
 XX DT 04-DEC-2003 (first entry)
 XX DE Immunostimulatory nucleic acid #695.
 XX ds; allergy; asthma; poly-G nucleic acid; aerosol formulation;
 KW hypo-responsive subject; immunostimulatory.
 XX OS Synthetic.
 XX OS US2003087848-A1.
 XX PN 08-MAY-2003.

XX 02-FEB-2001; 2001US-00776479.
 XX 03-FEB-2000; 2000US-0179991P.
 XX (BRAT/) BRATZLER R L.
 XX (PETE/) PETERSEN D M.
 XX (FOUR/) FOURON Y.
 XX Bratzler RL, Petersen DM, Fouron Y;
 XX WPI; 2003-657977/62.
 XX Treating and/or preventing allergy or asthma using an immunostimulatory
 XX nucleic acid alone or in combination with an asthma/allergy medicament.
 XX PS Disclosure; Page 16; 221pp; English.
 XX CC The invention relates to a method of treating or preventing allergy or
 CC asthma which comprises administering to a subject a poly-G nucleic acid
 CC in an aerosol formulation. The methods and compositions of the present
 CC invention are useful for diagnosing and/or treating asthma and allergy
 CC especially in a hypo-responsive subject. The present sequence represents
 CC an immunostimulatory nucleic acid of the invention.
 XX SQ Sequence 21 BP; 0 A; 7 C; 7 G; 7 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. NO. 9.4e-02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 1245 CGATGAGGACGACGACGAC 1263
 DB 20 CGACGACGACGACGACGAC 2
 RESULT 813
 ADD00769/c
 ID ADD00769 standard; RNA; 21 BP.
 XX AC ADD00769;
 XX DT 01-JAN-2004 (first entry)
 XX DE Anti-HCV agent LZ-PAIR-97 DNA-RNA hybrid.
 XX HCV infection; replication; pathogenesis; virucide; vaccine;
 KW gene therapy; ds; anti-HCV; LZ-PAIR; DNA-RNA hybrid.
 XX OS Synthetic.
 OS Hepatitis C virus.
 XX Key Location/Qualifiers
 FT misc_RNA 1..21
 FT /tag= b
 FT /note= "DNA-RNA hybrid due to presence of 2 2'-
 FT deoxythymidine overhangs at 3' end of each strand.
 FT Optionally the overhanging bases may be uracil."
 FT misc_feature 1
 FT /tag= a
 FT /label= Sticky_end
 FT /note= "The 3' end of the complementary strand overhangs
 FT the 5' end of this strand by the sequence dtdt"
 FT misc_feature 21
 FT /tag= c
 FT /label= Sticky_end
 FT /note= "The 3' end of this strand overhangs the 5' end of
 FT the complementary strand by the sequence dtdt"
 XX PN WO2003016572-A1.
 XX PD 27-FEB-2003.

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PF 16-AUG-2002; 2002WO-US021843.
XX
PR 17-AUG-2001; 2001US-0313076P.
PR 20-DEC-2001; 2001US-0344116P.
PR 01-FEB-2002; 2002US-0353750P.
XX
PA (BLIL) LILLY & CO ELI.
XX
PI Zhao G, Lu J, Glass JI, Martinez A, Yang Y;
XX WPI; 2003-268345/26.
XX
PR New double stranded RNA oligonucleotide, useful for preparing a
PT composition for treating or preventing hepatitis C virus.
XX
PS Disclosure; Page 103; 173pp; English.
XX
CC The invention relates to a novel isolated double stranded RNA
CC oligonucleotide about 19 to about 25 ribonucleotides in length or its
CC equivalent. One strand of the oligonucleotide comprises the same
CC nucleotide sequence as a region of a hepatitis C virus (HCV) target RNA
CC polynucleotide sequence required for hepatitis C virus infection,
CC replication or pathogenesis in vitro or in vivo in a host cell. The
CC oligonucleotide of the invention demonstrates virucide activity and may
CC be useful for preparing a composition or vaccine for treating or
CC preventing hepatitis C virus, as well as during gene therapy procedures.
CC The current sequence is that of the anti-HCV agent LZ-PAIR DNA-RNA hybrid
CC of the invention.
XX
SQ Sequence 21 BP; 0 A; 15 C; 1 G; 2 T; 3 U; 0 Other;
Query Match 0.7%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 9.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1334 AGAGGAGGAGAGGGGG 1352
DB 20 AGGGGAGGAGAGGGGCG 2
RESULT 814
ADD20465
ID ADD20465 standard; DNA; 21 BP.
XX
AC ADD20465;
XX
DT 15-JAN-2004. (first entry)
XX
DE Oreochromis niloticus microsatellite primer SEQ ID NO:1100.
XX
KW single nucleotide polymorphism; SNP; fish; Salmo salar;
KW Oreochromis niloticus; Atlantic halibut; microsatellite; cod;
KW polymorphic site; seabass; salmonidae; Tilapia; rainbow trout; halibut;
KW detection; primer; ss.
XX
OS Synthetic.
OS Oreochromis niloticus.
XX
FN WO2003060160-A2.
XX
PD 24-JUL-2003.
XX
PF 17-JAN-2003; 2003WO-IB000112.
XX
PR 18-JAN-2002; 2002US-0349950P.
PR 16-AUG-2002; 2002US-0404200P.
XX
PA (GENO-) GENOMAR ASA.
XX
PI Lie O, Slettan A, Hoyum M, Lingaas F;
XX WPI; 2003-627388/59.
XX
XX
PT Novel isolated nucleic acid molecule comprising single nucleotide
PT polymorphism associated with fish, useful for forming PCR primers which
PT are used for detecting single nucleotide polymorphisms in fish nucleic
PT acids.
XX
XX Claim 18; SEQ ID NO 1100; 233pp; English.
XX
CC The present invention describes an isolated nucleic acid (I) comprising a
CC single nucleotide polymorphism (SNP) chosen from: (i) a nucleic acid of
CC Salmo salar SNPs, Oreochromis niloticus SNPs or Atlantic halibut SNPs; and
CC (ii) a nucleic acid having nucleotide sequence that hybridises to:
CC (i), or its complement under highly stringent hybridisation conditions.
CC Also described: (i) an isolated oligonucleotide (II) comprising at least
CC 17 contiguous nucleotides of a nucleotide sequence of S. salar SNPs, O.
CC niloticus SNPs, O. niloticus microsatellites, Atlantic halibut SNPs, cod
CC polymorphic sites and seabass polymorphic sites, or their complement; (2)
CC of amplifying a nucleotide sequence chosen from S. salar SNPs and, O.
CC niloticus SNPs, O. niloticus microsatellites, Atlantic halibut SNPs, cod
CC polymorphic sites and seabass polymorphic sites; and determining (M1) the
CC origin of fish sample comprising providing a parentage genotype database
CC comprising a collection of candidate parent genotypes, where each of the
CC candidate parent genotype represents a distinct origin, and comparing a
CC sample genotype to the parentage genotype database, where a match between
CC the sample genotype and one of the candidate parent genotype identifies
CC to the origin of the sample. (M1) is useful for determining the origin of
CC a fish sample such as family salmonidae, S. salar, Tilapia, O. niloticus,
CC rainbow trout, halibut, seabass and Atlantic cod. (II) is useful for
CC detecting nucleic acid molecule comprising SNP in a sample, which
CC involves contacting the sample containing nucleic acids with one or more
CC (II) derived from nucleotide sequence of S. salar SNPs and O. niloticus
CC SNPs, and identifying nucleic acid that hybridises to (II). (II) is
CC useful for detecting nucleic acid molecule comprising a polymorphic
CC sequence in a sample, comprising contacting the sample containing nucleic
CC acids with one or more (II) which is derived from O. niloticus
CC microsatellite, O. niloticus SNPs, Atlantic halibut SNPs, cod polymorphic
CC sites or seabass polymorphic sites, and identifying a nucleic acid that
CC hybridises to (II). (III) is useful for detecting nucleic acid molecule
CC comprising a microsatellite sequence in sample. The present sequence is
CC used in the exemplification of the present invention.
XX
SQ Sequence 21 BP; 4 A; 5 C; 3 G; 9 T; 0 U; 0 Other;
Query Match 0.7%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 9.4e+02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
QY 1591 TCTCTGTGTATTATATAA 1609
DB 2 TCGCTGTGTATTCTATCA 20
RESULT 815
ADE77982/C
ID ADE77982 standard; DNA; 21 BP.
XX
XX ADE77982;
AC ADE77982;
XX
DT 29-JAN-2004 (first entry)
XX
DE DNA oligo (SeqID 233) encodes peptide that binds atherosclerotic lesions.
XX
KW ss; gene; atherosclerotic lesion; antiatherosclerotic; cerebroprotective;
KW antianginal; thrombolytic; cardiant; ophthalmological; neuroprotective;
KW nephrotropic; vasotropic; atherosclerosis; stroke; angina; thrombosis;
KW myocardial infarction; ischaemic heart disease;
KW transplantation-induced sclerosis; intermittent claudication; diabetes;
KW peripheral artery disease; congestive heart failure; retinopathy;
KW neuropathy; nephropathy; thrombosis.
XX
OS Synthetic.
XX
FN WO2003014145-A2.

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XX PD 20-FEB-2003.
XX PN
XX PF 09-AUG-2002; 2002WO-EP008942.
XX PR 10-AUG-2001; 2001US-0311507P.
XX PR
XX PA (NOVS ) NOVARTIS AG.
XX PA (NOVS ) NOVARTIS PHARMA GMBH.
XX PA (SCRI ) SCRIPPS RES INST.
XX PI Liu C, Edgington TS, Prescott MF;
XX DR WPI; 2003-278468/27.
XX DR P-PSDB; ADE77983.
XX PT Novel peptide which selectively bind to mammalian atherosclerotic
XX PT lesions, useful for treating atherosclerosis in a mammal, and for
XX PT identifying location of atherosclerotic lesion in mammal.
XX PS Claim 16; SEQ ID NO 233; 286pp; English.
XX CC This invention relates to novel isolated peptides that selectively bind
XX CC to mammalian atherosclerotic lesions and as such can be used to detect
XX CC and/or treat vascular problems. Specifically, it refers to methods for
XX CC the in vivo identification of such peptides by using phage display
XX CC libraries, and also methods for identifying the targets of biomolecules
XX CC bound by the peptides. Diagnosis of pathological conditions of the
XX CC endothelial tissue occurs by administration of a peptide conjugated to a
XX CC reporter molecule or therapeutic agent. As such, these peptides can be
XX CC described variously as antiatherosclerotic, cerebroprotective,
XX CC antianginal, thrombolytic, cardiant, ophthalmological, neuroprotective,
XX CC nephrotropic and vasotropic. The present invention describes these
XX CC peptides as useful for treating atherosclerosis, as well as identifying
XX CC the location and severity of an atherosclerotic lesion in a mammal.
XX CC Atherosclerosis causes stroke, angina, thrombosis, myocardial infarction,
XX CC ischaemic heart disease, transplantation-induced sclerosis and
XX CC intermittent claudication. Furthermore, it is associated with diabetes,
XX CC which in turn can lead to peripheral artery disease, congestive heart
XX CC failure, retinopathy, neuropathy, nephropathy or thrombosis. This
XX CC oligonucleotide sequence, isolated from a combinatorial phage display
XX CC library, encodes a peptide that binds to atherosclerotic lesions, the aim
XX CC of the invention.
XX SQ Sequence 21 BP; 3 A; 8 C; 5 G; 5 T; 0 U; 0 Other;
Query Match 0.7%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 9.4e-02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy 761 ATGACGAGTCTCTATGAGGC 779
Db 21 ATGACGAGTCTCTATGAGGC 3
RESULT 816
ADE78162/c
ID ADE78162 standard; DNA; 21 BP.
XX AC ADE78162;
XX DT 29-JAN-2004 (first entry)
XX DE DNA oligo (SeqID 413) encodes peptide that binds atherosclerotic lesions.
XX ss; gene; atherosclerotic lesion; antiatherosclerotic; cerebroprotective;
XX antianginal; thrombolytic; cardiant; ophthalmological; neuroprotective;
XX nephrotropic; vasotropic; atherosclerosis; stroke; angina; thrombosis;
XX myocardial infarction; ischaemic heart disease;
XX transplantation-induced sclerosis; intermittent claudication; diabetes;
XX peripheral artery disease; congestive heart failure; retinopathy;
XX neuropathy; nephropathy; thrombosis.
OS Synthetic.
XX WO2003014145-A2.
XX PD 20-FEB-2003.
XX PF 09-AUG-2002; 2002WO-EP008942.
XX PR 10-AUG-2001; 2001US-0311507P.
XX PR
XX PA (NOVS ) NOVARTIS AG.
XX PA (NOVS ) NOVARTIS PHARMA GMBH.
XX PA (SCRI ) SCRIPPS RES INST.
XX PI Liu C, Edgington TS, Prescott MF;
XX DR WPI; 2003-278468/27.
XX DR P-PSDB; ADE78163.
XX PT Novel peptide which selectively bind to mammalian atherosclerotic
XX PT lesions, useful for treating atherosclerosis in a mammal, and for
XX PT identifying location of atherosclerotic lesion in mammal.
XX PS Claim 16; SEQ ID NO 413; 286pp; English.
XX CC This invention relates to novel isolated peptides that selectively bind
XX CC to mammalian atherosclerotic lesions and as such can be used to detect
XX CC and/or treat vascular problems. Specifically, it refers to methods for
XX CC the in vivo identification of such peptides by using phage display
XX CC libraries, and also methods for identifying the targets of biomolecules
XX CC bound by the peptides. Diagnosis of pathological conditions of the
XX CC endothelial tissue occurs by administration of a peptide conjugated to a
XX CC reporter molecule or therapeutic agent. As such, these peptides can be
XX CC described variously as antiatherosclerotic, cerebroprotective,
XX CC antianginal, thrombolytic, cardiant, ophthalmological, neuroprotective,
XX CC nephrotropic and vasotropic. The present invention describes these
XX CC peptides as useful for treating atherosclerosis, as well as identifying
XX CC the location and severity of an atherosclerotic lesion in a mammal.
XX CC Atherosclerosis causes stroke, angina, thrombosis, myocardial infarction,
XX CC ischaemic heart disease, transplantation-induced sclerosis and
XX CC intermittent claudication. Furthermore, it is associated with diabetes,
XX CC which in turn can lead to peripheral artery disease, congestive heart
XX CC failure, retinopathy, neuropathy, nephropathy or thrombosis. This
XX CC oligonucleotide sequence, isolated from a combinatorial phage display
XX CC library, encodes a peptide that binds to atherosclerotic lesions, the aim
XX CC of the invention.
XX SQ Sequence 21 BP; 3 A; 8 C; 5 G; 5 T; 0 U; 0 Other;
Query Match 0.7%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 9.4e-02;
Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
Qy 761 ATGACGAGTCTCTATGAGGC 779
Db 21 ATGACGAGTCTCTATGAGGC 3
RESULT 817
ADE78038/c
ID ADE78038 standard; DNA; 21 BP.
XX AC ADE78038;
XX DT 29-JAN-2004 (first entry)
XX DE DNA oligo (SeqID 289) encodes peptide that binds atherosclerotic lesions.
XX ss; gene; atherosclerotic lesion; antiatherosclerotic; cerebroprotective;
XX antianginal; thrombolytic; cardiant; ophthalmological; neuroprotective;
XX nephrotropic; vasotropic; atherosclerosis; stroke; angina; thrombosis;
XX myocardial infarction; ischaemic heart disease;
XX transplantation-induced sclerosis; intermittent claudication; diabetes;
XX neuropathy; nephropathy; thrombosis.

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KW peripheral artery disease; congestive heart failure; retinopathy;
 KW neuropathy; nephropathy; thrombosis.
 XX Synthetic.
 XX WO2003014145-A2.
 XX 20-FEB-2003.
 XX 09-AUG-2002; 2002WO-EP008942.
 XX 10-AUG-2001; 2001US-0311507P.
 XX (NOVS) NOVARTIS AG.
 PA (NOVS) NOVARTIS PHARMA GMBH.
 PA (SCRI) SCRIPPS RES INST.
 XX
 PI Liu C, Edgington TS, Prescott MF;
 XX
 DR WPI; 2003-278468/27.
 DR P-PSDB; ADE78039.
 XX
 XX Novel peptide which selectively bind to mammalian atherosclerotic
 PT lesions, useful for treating atherosclerosis in a mammal, and for
 PT identifying location of atherosclerotic lesion in mammal.
 XX
 XX Claim 16; SEQ ID NO 289; 286pp; English.
 XX
 CC This invention relates to novel isolated peptides that selectively bind
 CC to mammalian atherosclerotic lesions and as such can be used to detect
 CC and/or treat vascular problems. Specifically, it refers to methods for
 CC the in vivo identification of such peptides by using phage display
 CC libraries, and also methods for identifying the targets of biomolecules
 CC bound by the peptides. Diagnosis of pathological conditions of the
 CC endothelial tissue occurs by administration of a peptide conjugated to a
 CC reporter molecule or therapeutic agent. As such, these peptides can be
 CC described variously as antiatherosclerotic, cerebroprotective,
 CC antitumoral, thrombolytic, cardiant, ophthalmological, neuroprotective,
 CC nephrotropic and vasotropic. The present invention describes these
 CC peptides as useful for treating atherosclerosis, as well as identifying
 CC the location and severity of an atherosclerotic lesion in a mammal.
 CC Atherosclerosis causes stroke, angina, thrombosis, myocardial infarction,
 CC ischaemic heart disease, transplantation-induced sclerosis and
 CC intermittent claudication. Furthermore, it is associated with diabetes,
 CC which in turn can lead to peripheral artery disease, congestive heart
 CC failure, retinopathy, neuropathy, nephropathy or thrombosis. This
 CC oligonucleotide sequence, isolated from a combinatorial phage display
 CC library, encodes a peptide that binds to atherosclerotic lesions, the aim
 CC of the invention.
 XX
 XX SQ Sequence 21 BP; 3 A; 8 C; 5 G; 5 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14.2; DB 1; Length 21;
 Best Local Similarity 84.2%; Pred. No. 9.4e+02;
 Matches 16; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 QY 761 ATGACGAGTCTATGAGGC 779
 Db 21 ATGACGAGTCTATGAGGC 779
 RESULT 818
 AAT55111
 ID AAT55111 standard; RNA; 15 BP.
 XX
 AC AAT55111;
 XX
 DT 25-MAR-2003 (revised)
 DT 21-APR-1997 (first entry)
 XX
 DE Human relA hammerhead ribozyme target sequence (nt. position 996).
 XX Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
 KW

KW gene expression; downregulation; interleukin-5; IL-5; ICAM-1;
 KW intercellular adhesion molecule; rel A; tumour necrosis factor;
 KW TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene;
 KW translocation; chronic myelogenous leukaemia; CML; cancer;
 KW Philadelphia chromosome; inflammation; autoimmune disease;
 KW atherosclerosis; myocardial infarction; stroke; restenosis;
 KW transplant rejection; rheumatoid arthritis; psoriasis;
 KW myocardial ischaemia; Kawasaki disease; septic shock; HIV;
 KW human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
 SS.
 XX Homo sapiens.
 XX WO9523225-A2.
 XX 31-AUG-1995.
 XX 23-FEB-1995; 95WO-IB000156.
 XX 23-FEB-1994; 94US-00201109.
 XX 23-MAR-1994; 94US-00218934.
 XX 04-APR-1994; 94US-00222795.
 XX 07-APR-1994; 94US-00224483.
 XX 15-APR-1994; 94US-00227958.
 XX 15-APR-1994; 94US-00228041.
 XX 18-MAY-1994; 94US-00245736.
 XX 08-JUL-1994; 94US-00271280.
 XX 15-AUG-1994; 94US-0029132.
 XX 17-AUG-1994; 94US-00291433.
 XX 17-AUG-1994; 94US-00292620.
 XX 19-AUG-1994; 94US-00293520.
 XX 02-SEP-1994; 94US-00300000.
 XX 08-SEP-1994; 94US-00303039.
 XX 23-SEP-1994; 94US-00311486.
 XX 23-SEP-1994; 94US-00311749.
 XX 28-SEP-1994; 94US-00314397.
 XX 03-OCT-1994; 94US-00316771.
 XX 07-OCT-1994; 94US-00319492.
 XX 11-OCT-1994; 94US-00321993.
 XX 04-NOV-1994; 94US-00334847.
 XX 10-NOV-1994; 94US-00337608.
 XX 16-DEC-1994; 94US-00345516.
 XX 23-DEC-1994; 94US-00357577.
 XX 30-JAN-1995; 95US-00363233.
 XX (RIBO-) RIBOZYME PHARM INC.
 XX Stinchcomb DT, Chowrira B, Dorenzo A, Draper KG, Dudycz LW;
 PI Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
 PI Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
 PI Tracz D, Usman N, Wincott FE, Woolf T;
 DR WPI; 1995-351090/45.
 XX
 PT Ribozymes having modified bases and methods for producing them - for use
 PT in inhibiting disease related genes.
 XX
 XX Claim 2; Page 229; 407pp; English.
 CC The present sequence represents a preferred target sequence for an
 CC enzymatic nucleic acid (i.e. a ribozyme) which cleaves relA mRNA at the
 CC nucleotide base position indicated in the DE line. The relA gene product
 CC is a subunit of the transcriptional regulator NF-kappaB and is implicated
 CC specifically in the induction of inflammatory responses. Regions of the
 CC mRNA that do not form secondary folding structures and that contain
 CC potential hammerhead and hairpin ribozyme cleavage sites were identified
 CC by computer analysis. Ribozymes directed against these mRNA sequences
 CC were designed and synthesised with modifications that improve their
 CC nuclease resistance. The ribozymes are designed to cleave the target
 CC sequences and thereby inhibit relA expression, making them potentially
 CC useful for treating rheumatoid arthritis, restenosis and asthma as well
 CC as for increasing tolerance to transplanted tissues. The potential

CC immunosuppressive properties of a ribozyme that cleaves relA mRNA means
CC that uses are limited to local delivery, acute indications or ex vivo
CC treatment. (Updated on 25-MAR-2003 to correct PI field.)

XX Sequence 15 BP; 6 A; 3 C; 4 G; 0 T; 2 U; 0 Other;

Query Match 0.7%; Score 14; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 6.1e+02;
Matches 12; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 997 AGGACATATGAGAC 1010
DB 1 AGGACAUUGAGAC 14

RESULT 819
AAAF53137
ID AAF53137 standard; DNA; 15 BP.

XX AAF53137;
XX 30-MAR-2001 (first entry)
XX IGF-I oligonucleotide #4097.

XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;
KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW hyperneovascular condition; hyperplasia; kidney disease;
KW neovascular condition of the retina; ss.

XX Homo sapiens.
XX WO200078341-A1.
XX 28-DEC-2000.

XX 21-JUN-2000; 2000WO-AU000693.
XX 21-JUN-1999; 99US-0140345P.

XX (MURD-) MURDOCH CHILDRENS RES INST.
XX Wraight CJ, Werther GA, Edmondson SR;
XX WPI; 2001-041421/05.

XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT inhibits or reduces growth factor mediated cell proliferation and/or
PT inflammation.

XX Example 8; Page 87; 201pp; English.

XX The present invention relates to a method for ameliorating the effects of
CC skin disorders. The method comprises contacting the skin with an
CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisense
CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC F45161). The method is useful for ameliorating the effects of psoriasis,
CC ichthyosis, ptyriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC hyperneovascular condition such as a neovascular condition of the retina,
CC brain or skin, growth factor-mediated malignancies, other sclerotic
CC disease, kidney disease, hyperproliferation of the inside of blood
CC vessels or any other hyperplasia

SQ Sequence 15 BP; 4 A; 4 C; 7 G; 0 T; 0 U; 0 Other;
Query Match 0.7%; Score 14; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1349 GGGCGCGCAAGAAC 1362
DB 1 GGGCGCGCAAGAAC 14

RESULT 820
AAAF53135
ID AAF53135 standard; DNA; 15 BP.

XX AAF53135;
XX 30-MAR-2001 (first entry)
XX IGF-I oligonucleotide #4095.

XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; ptyriasis;
KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba;
KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW hyperneovascular condition; hyperplasia; kidney disease;
KW neovascular condition of the retina; ss.

XX Homo sapiens.
XX WO200078341-A1.
XX 28-DEC-2000.

XX 21-JUN-2000; 2000WO-AU000693.
XX 21-JUN-1999; 99US-0140345P.

XX (MURD-) MURDOCH CHILDRENS RES INST.
XX Wraight CJ, Werther GA, Edmondson SR;
XX WPI; 2001-041421/05.

XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT inhibits or reduces growth factor mediated cell proliferation and/or
PT inflammation.

XX Example 8; Page 87; 201pp; English.

XX The present invention relates to a method for ameliorating the effects of
CC skin disorders. The method comprises contacting the skin with an
CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisense
CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC F45161). The method is useful for ameliorating the effects of psoriasis,
CC ichthyosis, ptyriasis, ruba, pilaris, serborrhoea, keloids, keratosis,
CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC hyperneovascular condition such as a neovascular condition of the retina,
CC brain or skin, growth factor-mediated malignancies, other sclerotic
CC disease, kidney disease, hyperproliferation of the inside of blood
CC vessels or any other hyperplasia

SQ Sequence 15 BP; 4 A; 4 C; 7 G; 0 T; 0 U; 0 Other;
Query Match 0.7%; Score 14; DB 1; Length 15;
Best Local Similarity 100.0%; Pred. No. 6.1e+02;

Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1348 GGGGGCGCAAGAA 1361
 Db 2 GGGGGCGCAAGAA 15

RESULT 821
 AAV48570/c
 ID AAV48570 standard; DNA; 17 BP.
 XX
 AC AAV48570;
 XX
 DT 15-OCT-1998 (first entry)
 XX
 DE junB gene antisense oligonucleotide JunB-6.
 XX
 KW junB; junD; antisense oligonucleotide; modulate; gene expression; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN EP856579-A1.
 XX
 PD 05-AUG-1998.
 XX
 PF 31-JAN-1997; 97EP-00101531.
 XX
 PR 31-JAN-1997; 97EP-00101531.
 XX
 PA (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.
 XX
 PI Schlingensiepen K, Brysch W;
 XX
 DR WPI; 1998-400910/35.
 XX
 PT Preparation of antisense oligonucleotide(s) which lack long runs of
 PT consecutive guanosine or inosine - and have specific ratio of residues
 PT able to form two or three hydrogen bonds, have greater activity and
 PT reduced toxicity, used therapeutically or to modulate growth of cells in
 PT culture.
 XX
 PS Claim 10; Fig 5a; 286pp; English.
 XX
 CC AAV48564-708 represent antisense oligonucleotides directed against the
 CC junB and junD genes. Of these, only oligonucleotides AAV48563-614
 CC resulted in effective downregulation of negative growth control by JunB
 CC or JunD, while AAV48615-708 had little effect. The oligonucleotides
 CC exemplify the invention. The specification describes oligonucleotides
 CC that contain 8-30 nucleotides, which contain at most 8 nucleotides that
 CC can each form three hydrogen bonds to cytosine; do not contain four
 CC consecutive nucleotides able to form three H-bonds each to four
 CC consecutive cytosines; do not contain two sequences of three consecutive
 CC nucleotides each able to form three H-bonds to three consecutive
 CC cytosines, and the ratio between residues able to form two H-bonds each
 CC (2R) or three such bonds (3R) is given by $2R/3R = 0.33-0.72$. The
 CC oligonucleotides are used to modulate expression of genes, particularly
 CC the genes for p53, ErbB-2, junB, junD, TGF-beta 1 or beta 2 to control
 CC proliferation of primary cell cultures (e.g. bone marrow stem, liver or
 CC kidney cells, osteoclasts, osteoblasts and/or keratinocytes). The
 CC oligonucleotides can also be used to analyse function of proteins (by
 CC altering their expression or activity) and therapeutically, e.g. in cases
 CC of cancer or (targeting TGF) for stimulating the immune system
 XX
 SQ Sequence 17 BP; 3 A; 1 C; 6 G; 7 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 7.4e+02;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1785 ACAAACTCTGAAA 1798
 Db 15 ACAAACTCTGAAA 2

RESULT 822
 ABQ64001/c
 ID ABQ64001 standard; DNA; 17 BP.
 XX
 AC ABQ64001;
 XX
 DT 20-AUG-2002 (first entry)
 XX
 DE Human KTM01a portion (ABQ63232) probe # 714.
 XX
 KW Human; KTM01a; KTM01; kidney tumour overexpressed membrane; cytostatic;
 KW gene therapy; cancer; kidney; liver; bone marrow; brain; heart; lung;
 KW kidney; colon; skeletal muscle; testis; uterus; placenta; probe; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200224750-A2.
 XX
 PD 28-MAR-2002.
 XX
 PF 21-SEP-2001; 2001WO-US029656.
 XX
 PR 21-SEP-2000; 2000US-0234687P.
 PR 27-SEP-2000; 2000US-0236359P.
 PR 04-OCT-2000; 2000GB-00024263.
 PR 30-JAN-2001; 2001WO-US000661.
 PR 30-JAN-2001; 2001WO-US000662.
 PR 30-JAN-2001; 2001WO-US000663.
 PR 30-JAN-2001; 2001WO-US000664.
 PR 30-JAN-2001; 2001WO-US000665.
 PR 30-JAN-2001; 2001WO-US000666.
 PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 30-JAN-2001; 2001WO-US000669.
 PR 23-MAY-2001; 2001WO-US000670.
 PR 28-AUG-2001; 2001US-0084761.
 XX
 PA (AEOM-) AEOMICA INC.
 XX
 PI Zhang J;
 XX
 DR WPI; 2002-479509/51.
 XX
 PT New human kidney tumor overexpressed membrane (KTM01) protein and nucleic
 PT acids encoding the protein, useful for treating subjects having defects
 PT in KTM01 which can manifest as cancer of the kidney, or as a disorder of
 PT e.g., liver or bone.
 XX
 PS Example 2; Page 251; 418pp; English.
 XX
 CC The invention relates to a novel isolated nucleic acid encoding human
 CC KTM01 (kidney tumour overexpressed membrane) protein. The protein of the
 CC invention has cytostatic activity. The nucleotide may have a use in gene
 CC therapy. The KTM01 nucleic acids may be used to diagnose, treat or
 CC monitor a disease caused by altered expression of human KTM01.
 CC Compositions comprising the nucleic acids, proteins or antibodies may be
 CC used to treat subjects having defects in KTM01 which can manifest as
 CC cancer of the kidney, as well as a disorder of liver, bone marrow, brain,
 CC heart, lung, kidney, colon, skeletal muscle, testis, uterus and placenta
 CC function. The sequence represents a probe used in the invention to scan
 CC the nt 1-1001 portion of human KTM01a (ABQ63232)
 XX
 SQ Sequence 17 BP; 4 A; 4 C; 2 G; 7 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 7.4e+02;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1202 AAATCCAGCGCAT 1215
 Db 15 AAATCCAGCGCAT 2

Db	17	AAATGCGGCGATT 4	
RESULT 823			
ID	ABQ64006/c		
XX	ABQ64006 standard; DNA; 17 BP.		
AC	ABQ64006;		
XX			
DT	20-AUG-2002 (first entry)		
XX			
DE	Human KTOM1a portion (ABQ63232) probe # 719.		
XX			
KW	Human; KTOM1a; KTOM1; kidney tumour overexpressed membrane; cytostatic;		
KW	gene therapy; cancer; kidney; liver; bone marrow; brain; heart; lung;		
KW	kidney; colon; skeletal muscle; testis; uterus; placenta; probe; ss.		
XX			
OS	Homo sapiens.		
XX			
PN	WQ200224750-A2.		
XX			
PD	28-MAR-2002.		
XX			
PF	21-SEP-2001; 2001WO-US029656.		
XX			
PR	21-SEP-2000; 2000US-0234687P.		
PR	27-SEP-2000; 2000US-0236359P.		
PR	04-OCT-2000; 2000GB-00024263.		
PR	30-JAN-2001; 2001WO-US000661.		
PR	30-JAN-2001; 2001WO-US000662.		
PR	30-JAN-2001; 2001WO-US000663.		
PR	30-JAN-2001; 2001WO-US000664.		
PR	30-JAN-2001; 2001WO-US000665.		
PR	30-JAN-2001; 2001WO-US000666.		
PR	30-JAN-2001; 2001WO-US000667.		
PR	30-JAN-2001; 2001WO-US000668.		
PR	30-JAN-2001; 2001WO-US000669.		
PR	30-JAN-2001; 2001WO-US000670.		
PR	23-MAY-2001; 2001US-00864761.		
PR	28-AUG-2001; 2001US-0315676P.		
XX			
PA	(AEOM-) AEOMICA INC.		
XX			
PI	Zhang J;		
XX			
DR	WPI; 2002-479509/51.		
XX			
PT	New human kidney tumor overexpressed membrane (KTOM1) protein and nucleic		
PT	acids encoding the protein, useful for treating subjects having defects		
PT	in KTOM1 which can manifest as cancer of the kidney, or as a disorder of		
PT	e.g., liver or bone.		
XX			
PS	Example 2; Page 251; 418pp; English.		
XX			
CC	The invention relates to a novel isolated nucleic acid encoding human		
CC	KTOM1 (kidney tumour overexpressed membrane) protein. The protein of the		
CC	invention has cytostatic activity. The nucleotide may have a use in gene		
CC	therapy. The KTOM1 nucleic acids may be used to diagnose, treat or		
CC	monitor a disease caused by altered expression of human KTOM1.		
CC	Compositions comprising the nucleic acids, proteins or antibodies may be		
CC	used to treat subjects having defects in KTOM1 which can manifest as		
CC	cancer of the kidney, as well as a disorder of liver, bone marrow, brain,		
CC	heart, lung, kidney, colon, skeletal muscle, testis, uterus and placenta		
CC	function. The sequence represents a probe used in the invention to scan		
CC	the nt 1-1001 portion of human KTOM1a (ABQ63232)		
XX			
SQ	Sequence 17 BP; 1 A; 5 C; 5 G; 6 T; 0 U; 0 Other;		
Query March	0.7%; Score 14; DB 1; Length 17;		
Best Local Similarity	100.0%; Pred. No. 7.4e+02;		
Matches 14; Conservative	0; Mismatches 0; Indels 0; Gaps 0;		
Oy	1200 CCAATGCGGCGA 1213		

Db	14	CCAAATGCGGCGA 1	
RESULT 824			
ID	ACA08253		
XX	ACA08253 standard; DNA; 17 BP.		
AC	ACA08253;		
XX			
DT	03-JUN-2003 (first entry)		
XX			
DE	Necrosis factor kappa B (NFkB) sub-unit modulating DNazyme #22.		
XX			
KW	Enzymatic nucleic acid; nuclear factor kappa B; NFkB; inozyme; zinzyme;		
KW	G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; lung cancer;		
KW	prostate cancer; colorectal cancer; brain cancer; oesophageal cancer;		
KW	stomach cancer; bladder cancer; pancreatic cancer; cervical cancer;		
KW	head and neck cancer; ovarian cancer; melanoma; lymphoma; glioma;		
KW	multidrug resistant cancer; REL-A-specific inhibitor; chemotherap;		
KW	paclitaxel; docetaxel; cisplatin; methotrexate; cyclophosphamide;		
KW	doxorubin; fluorouracil carboplatin; edatrexate; gencitabine;		
KW	radiation therapy; inflammatory disease; asthma; diabetes;		
KW	rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;		
KW	gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;		
KW	transplant/graft rejection; reperfusion injury; glomerulonephritis;		
KW	allergic airway inflammation; inflammatory bowel disease; infection; ss.		
OS	Synthetic.		
XX			
PN	US2002177568-A1.		
XX			
PD	28-NOV-2002.		
XX			
PF	23-MAY-2001; 2001US-00864785.		
XX			
PR	07-DEC-1992; 92US-00987132.		
PR	18-MAY-1994; 94US-00245466.		
PR	15-AUG-1994; 94US-00291932.		
PR	23-DEC-1996; 96US-00777916.		
XX			
PA	(STIN/) STINCHCOMB D T.		
PA	(MCSW/) MCSWIGGEN J.		
PA	(DRAP/) DRAPER K G.		
XX			
PI	Stinchcomb DT, Mcswiggen J, Draper KG;		
XX			
DR	WPI; 2003-340953/32.		
XX			
PT	Novel enzymatic nucleic acid molecules which down regulates expression of		
PT	a sequence encoding a subunit of nuclear factor kappa B useful for		
PT	treating cancer, inflammatory disorders and autoimmune diseases.		
XX			
PS	Claim 3; Page 44; 72pp; English.		
XX			
CC	The invention describes an enzymatic nucleic acid molecule (I) which down		
CC	regulates expression of a sequence encoding a subunit of nuclear factor		
CC	kappa B (NFkB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme		
CC	configuration. The enzymatic nucleic acid molecule is adapted to treat		
CC	cancer and is useful for down-regulating REL-A activity in a cell for		
CC	treating a patient having a condition associated with the level of REL-A.		
CC	(I) is useful for cleaving RNA comprising a sequence of REL-A gene, in		
CC	the presence of a divalent cation, especially Mg ²⁺ . The enzymatic and		
CC	antisen nucleic acid molecules are useful for treating breast, lung,		
CC	prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,		
CC	cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or		
CC	multidrug resistant cancer. The method involves use of other drug		
CC	therapies such as monoclonal antibodies, REL-A-specific inhibitors or		
CC	chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,		
CC	cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate,		
CC	gencitabine or radiation therapy. The enzymatic and antisen nucleic		
CC	acid molecules are also useful for treating inflammatory disease such as		
CC	rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,		

CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
 CC rejection, gene therapy applications, ischaemia/reperfusion injury
 CC (central nervous system (CNS) and myocardial), glomerulonephritis,
 CC sepsis, allergic airway inflammation, inflammatory bowel disease or
 CC infection. This sequence represents an enzymatic nucleic acid used to
 CC modulate the function of a necrosis factor kappa B sub-unit
 XX
 SQ Sequence 17 BP; 7 A; 3 C; 4 G; 0 T; 3 U; 0 Other;
 Query Match 0.7%; Score 14; DB 1; Length 17;
 Best Local Similarity 85.7%; Pred. No. 7.4e+02;
 Matches 12; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
 QY 997 AGGACATATGAGAC 1010
 Db 2 AGGACAUUGAGAC 15
 RESULT 825
 ACA06424
 ID ACA06424 standard; RNA; 17 BP.
 AC ACA06424;
 XX
 DT 03-JUN-2003 (first entry)
 XX
 DE NFkB sub-unit modulating inozyme substrate #243.
 XX
 KW Enzymatic nucleic acid; nuclear factor kappa B; NFkB; inozyme; zinzyme;
 KW G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human;
 KW lung cancer; prostate cancer; colorectal cancer; brain cancer;
 KW oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer;
 KW cervical cancer; head and neck cancer; ovarian cancer; melanoma;
 KW lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;
 KW chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;
 KW cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate;
 KW gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes;
 KW rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia;
 KW gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis;
 KW transplant/graft rejection; reperfusion injury; glomerulonephritis;
 KW allergic airway inflammation; inflammatory bowel disease; infection; ss.
 OS Homo sapiens.
 XX
 XX US2002177568-A1.
 XX
 XX 28-NOV-2002.
 XX
 PF 23-MAY-2001; 2001US-00864785.
 XX
 PR 07-DEC-1992; 92US-00987132.
 PR 18-MAY-1994; 94US-00245466.
 PR 15-AUG-1994; 94US-00291932.
 PR 23-DEC-1996; 96US-00777916.
 XX
 PA (STIN/) STINCHOMB D T.
 PA (MCSW/) MCSWIGGEN J.
 PA (DRAP/) DRAPER K G.
 PI Stinchcomb DT, Mcswiggen J, Draper KG;
 XX
 XX WPI; 2003-340953/32.
 XX
 PT Novel enzymatic nucleic acid molecules which down regulates expression of
 PT a sequence encoding a subunit of nuclear factor kappa B useful for
 PT treating cancer, inflammatory disorders and autoimmune diseases.
 XX
 PS Claim 3; Page 30; 72pp; English.
 XX
 CC The invention describes an enzymatic nucleic acid molecule (I) which down
 CC regulates expression of a sequence encoding a subunit of nuclear factor
 CC kappa B (NFkB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme
 CC configuration. The enzymatic nucleic acid molecule is adapted to treat

CC cancer and is useful for down-regulating REL-A activity in a cell, for
 CC treating a patient having a condition associated with the level of REL-A.
 CC (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in
 CC the presence of a divalent cation, especially Mg²⁺. The enzymatic and
 CC antiseptic nucleic acid molecules are useful for treating breast, lung,
 CC prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic,
 CC cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
 CC multidrug resistant cancer. The method involves use of other drug
 CC therapies such as monoclonal antibodies, REL-A-specific inhibitors or
 CC chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate,
 CC cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate,
 CC gemcitabine or radiation therapy. The enzymatic and antiseptic nucleic
 CC acid molecules are also useful for treating inflammatory disease such as
 CC rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes,
 CC obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft
 CC rejection, gene therapy applications, ischaemia/reperfusion injury
 CC (central nervous system (CNS) and myocardial), glomerulonephritis,
 CC sepsis, allergic airway inflammation, inflammatory bowel disease or
 CC infection. This sequence represents the substrate of a novel enzymatic
 CC nucleic acid molecule
 XX
 SQ Sequence 17 BP; 9 A; 2 C; 4 G; 0 T; 2 U; 0 Other;
 Query Match 0.7%; Score 14; DB 1; Length 17;
 Best Local Similarity 85.7%; Pred. No. 7.4e+02;
 Matches 12; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
 QY 997 AGGACATATGAGAC 1010
 Db 4 AGGACAUUGAGAC 17
 RESULT 826
 ACC65867
 ID ACC65867 standard; DNA; 17 BP.
 AC ACC65867;
 XX
 DT 01-JUL-2003 (first entry)
 XX
 DE Murine oligonucleotide associated with tumour suppression, SEQ ID 3114.
 XX
 KW Cytostatic; virucide; neuroprotective; nontropic; neuroleptic; murine;
 KW tumour suppression; tumour reversion; apoptosis; virus resistance;
 KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
 KW schizophrenia; ss.
 XX
 OS Mus musculus.
 XX
 XX WO2003025176-A2.
 XX
 PD 27-MAR-2003.
 XX
 PF 17-SEP-2002; 2002WO-IB004210.
 XX
 PR 17-SEP-2001; 2001PR-00011979.
 XX
 XX (MOLE-) MOLECULAR ENGINES LAB.
 XX
 XX Telerman A, Amson R, Tuijnder M;
 XX
 XX WPI; 2003-333167/31.
 XX
 PT New isolated nucleic acid, useful for treating viral diseases associated
 PT with tumors and cell degeneration, also related polypeptides, antibodies
 PT and transfected cells.
 XX
 PS Disclosure; Page 395; 738pp; French.
 XX
 CC The present invention relates to murine oligonucleotides (ACC62754-
 CC ACC68806), which are associated with tumour suppression, tumour
 CC reversion, apoptosis and virus resistance. The oligonucleotides are
 CC useful as (1) as probes and primers for detecting, identifying,

CC quantifying and/or amplifying nucleic acid, e.g. as one component of a
 CC gene chip; in vitro as (anti)sense reagents; and (2) for production of
 CC recombinant polypeptides. The oligonucleotides are useful for preparation
 CC of pharmaceuticals for prevention and/or treatment of viral diseases that
 CC are characterised by development of tumours or cell degeneration,
 CC specifically cancer but also Alzheimer's disease and schizophrenia
 XX
 SQ Sequence 17 BP; 1 A; 4 C; 4 G; 8 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 7.4e+02;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1983 TCTGCTGCTCTCTCT 1996
 DB 3 TCTGCTGCTCTCTCT 16
 RESULT 827
 ACC67627/c
 ID ACC67627 standard; DNA; 17 BP.
 AC ACC67627;
 XX
 AC
 XX
 AC
 XX
 01-JUL-2003 (first entry)
 XX
 DE Murine oligonucleotide associated with tumour suppression, SEQ ID 4874.
 XX
 KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
 KW tumour suppression; tumour reversion; apoptosis; virus resistance;
 KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
 KW schizophrenia; ss.
 XX
 OS Mus musculus.
 XX
 PN WO2003025176-A2.
 XX
 PD 27-MAR-2003.
 XX
 PF 17-SEP-2002; 2002WO-IB004210.
 XX
 PR 17-SEP-2001; 2001FR-00011979.
 XX
 PA (MOLE-) MOLECULAR ENGINES LAB.
 XX
 PI Telerman A, Amson R, Tuijnder M;
 XX
 DR WPI; 2003-333167/31.
 XX
 PT New isolated nucleic acid, useful for treating viral diseases associated
 PT with tumors and cell degeneration, also related polypeptides, antibodies
 PT and transfected cells.
 XX
 PS Disclosure; Page 600; 738pp; French.
 XX
 CC The present invention relates to murine oligonucleotides (ACC62754-
 CC ACC68806), which are associated with tumour suppression, tumour
 CC reversion, apoptosis and virus resistance. The oligonucleotides are
 CC useful as (1) as probes and primers for detecting, identifying,
 CC quantifying and/or amplifying nucleic acid, e.g. as one component of a
 CC gene chip; in vitro as (anti)sense reagents; and (2) for production of
 CC recombinant polypeptides. The oligonucleotides are useful for preparation
 CC of pharmaceuticals for prevention and/or treatment of viral diseases that
 CC are characterised by development of tumours or cell degeneration,
 CC specifically cancer but also Alzheimer's disease and schizophrenia
 XX
 SQ Sequence 17 BP; 3 A; 5 C; 2 G; 7 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14; DB 1; Length 17;
 Best Local Similarity 100.0%; Pred. No. 7.4e+02;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 241 AATGCTGAGGAGAT 254

DB 15 AATGCTGAGGAGAT 2
 RESULT 828
 AAQ66468
 ID AAQ66468 standard; DNA; 18 BP.
 XX
 AC AAQ66468;
 XX
 AC
 XX
 25-MAR-2003 (revised)
 DT 13-FEB-1995 (first entry)
 XX
 DE Probe KLM 07 based on inulinase peptide fragment 2.
 XX
 KW Polymerase chain reaction; primer; amplify; PCR; extension assay;
 KW functionality; inulinase; promoter; regulatory region; promoter;
 KW upstream activating sequence; upstream repressing sequence; UAS; URS;
 KW terminator; secretory signal; secretion; yeast; transformation; protein;
 KW metabolite; ss.
 XX
 OS Synthetic.
 XX
 PN WO9413821-A1.
 XX
 PD 23-JUN-1994.
 XX
 PF 09-DEC-1993; 93WO-EP003547.
 XX
 PR 11-DEC-1992; 92EP-00203932.
 PR 29-JAN-1993; 93EP-00200240.
 XX
 PA (UNIL) QUEST INT BV.
 XX
 PI Chapman JW, Musters W, Rouwenhorst RJ, Toschka H, Verbakel JMA;
 XX
 DR WPI; 1994-217894/26.
 XX
 PT Yeast regulatory sequence from the inulinase gene - for protein, RNA or
 PT metabolite prodn.
 XX
 PS Example 1; Fig 2a; 68pp; English.
 XX
 CC This sequence represents a probe which was based on the peptide DPKVFW,
 CC which is derived from inulinase fragment 2 (see also AAR56251) from the
 CC secreted inulinase, form I, and the cell wall bound inulinase, form II,
 CC by digestion with CNBr. Probes such as this, may also be used as primers
 CC in the amplification/identification of the inulinase gene. The amplified
 CC sequence has the sequence given in AAQ66474. The regulatory region of the
 CC inulinase gene comprises a promoter, an upstream activating or repressing
 CC sequence (UAS or URS), a terminator as a regulatory region, and a
 CC sequence encoding a secretory signal necessary for secreting a gene
 CC product from a yeast. This regulatory region may be used to prepare
 CC transformed yeasts for the production of desired gene products, eg.
 CC protein or metabolites. (Updated on 25-MAR-2003 to correct PN field.)
 XX
 SQ Sequence 18 BP; 6 A; 4 C; 4 G; 2 T; 0 U; 2 Other;
 Query Match 0.7%; Score 14; DB 1; Length 18;
 Best Local Similarity 77.8%; Pred. No. 8.1e+02;
 Matches 14; Conservative 2; Mismatches 2; Indels 0; Gaps 0;
 QY 1471 CCAGAAGCCAAAGGGGTC 1488
 DB 1 CCAGAAGCCAAAGGGGTC 18
 RESULT 829
 ACA60581/c
 ID ACA60581 standard; DNA; 18 BP.
 XX
 AC ACA60581;
 XX

DT 11-JUN-2003 (first entry)
 XX Antisense inhibition of human cyclin D2 related oligonucleotide #18.
 DE
 DE Human; cyclin D2; diagnostic; therapeutic; prophylaxis;
 KW cyclin 2 inhibition; ss.
 KW
 XX Homo sapiens.
 OS
 OS US6492173-B1.
 PN
 PN 10-DEC-2002.
 XX
 XX 01-AUG-2001; 2001US-00920760.
 PF
 PF 01-AUG-2001; 2001US-00920760.
 PR
 PR (ISIS-) ISIS PHARM INC.
 PA
 PA Cowsert LM;
 PI
 PI WPI; 2003-361492/34.
 DR
 DR Novel antisense compound useful for treating diseases associated with
 XX Cyclin D2 expression, comprises an oligonucleotide comprising up to 50
 PT nucleobases in length, which inhibits expression of Cyclin D2 in cells or
 PT tissues in vitro.
 PT
 PS Claim 1; Col 45-46; 40pp; English.
 XX
 CC The invention describes a compound (I) of up to 50 nucleobases in length,
 CC which inhibits the expression of Cyclin D2. (I) is useful for inhibiting
 CC the expression of Cyclin D2 in cells or tissues in vitro. (I) is thus
 CC useful for treating disease associated with Cyclin D2 expression. (I) is
 CC useful for diagnostics, therapeutics, prophylaxis and as research
 CC reagents and kits. This sequence represents human cyclin D2 inhibition
 CC associated oligonucleotide
 CC
 XX Sequence 18 BP; 0 A; 11 C; 3 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 14; DB 1; Length 18;
 Best Local Similarity 100.0%; Pred. No. 8.1e+02;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1337 AGGAGGGAGAGGGG 1350
 Db |||||
 16 AGGAGGGAGAGGGG 3
 RESULT 830
 AAV66778/c
 ID AAV66778 standard; DNA; 19 BP.
 XX
 AC AAV66778;
 XX
 DT 02-FEB-1999 (first entry)
 DE
 DE CAPS marker PCR primer 5F7R-1.5 for.
 XX
 KW L5D1; plant pathogen response; apoptosis; programmed cell death;
 KW disease resistance; herbicide resistance; transgenic plant;
 KW crop protection; co-dominant amplified polymorphic sequence; CAPS marker;
 KW 5F7R-1.5; PCR; primer; ss.
 XX
 OS Synthetic.
 OS Arabidopsis thaliana.
 OS
 PN WO9837755-A1.
 PN
 PD 03-SEP-1998.
 XX
 PF 27-FEB-1998; 98WO-US004077.
 XX

PR 28-FEB-1997; 97US-0039063P.
 XX
 PA (UYNC-) UNIV NORTH CAROLINA.
 XX
 PI Dangl JL, Dietrich RA, Richberg MH, Eppl PM;
 XX WPI; 1998-531501/45.
 DR
 DR
 XX New isolated Arabidopsis genes - useful for producing transgenic plants
 PT which show resistance to cell death caused by pathogens or herbicides.
 PT
 XX Example 4; Page 14; 88pp; English.
 PS
 PS Primers 5F7R-1.5 for and 5F7R-1.5 rev (see AAV66779) are designed for the
 CC PCR amplification of the agamous (AG) co-dominant amplified polymorphic
 CC sequence (CAPS) marker ch42. New PCR based RFLP (CAPS) markers, including
 CC 5F7R-1.5, were derived during cloning of the Arabidopsis thaliana lsd1
 CC gene. Wild-type L5D1 (see AAW72366-67) has an effect in regulating the
 CC initial response of plants to pathogens and the subsequent spread of
 CC plant cell death engendered by infection. Transgenic plants expressing
 CC L5D1 mutant genes that affect resistance to herbicides or plant pathogens
 CC that normally result in plant cell death are claimed
 XX
 SQ Sequence 19 BP; 7 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
 Query Match 0.7%; Score 14; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 966 TGGTTACACCAATC 979
 Db |||||
 14 TGGTTACACCAATC 1
 RESULT 831
 AAX86556
 ID AAX86556 standard; DNA; 19 BP.
 XX
 AC AAX86556;
 XX
 DT 04-OCT-1999 (first entry)
 XX
 DE Primer rf51 used for amplification and sequencing of RHD gene exons.
 DE
 KW Allele; Rhesus D antigen; Rhd; weak D phenotype; blood transfusion;
 KW PCR primer; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 OS
 XX WO9937763-A2.
 PN
 XX 29-JUL-1999.
 PD
 PF 18-DEC-1998; 98WO-EP008319.
 XX
 PR 23-JAN-1998; 98EP-00101203.
 XX
 PA (DRKB-) DRK BLUTSPENDEDIENST BADEN WUERTTEMBERG.
 XX
 PI Flegel WA, Wagner FF;
 XX
 XX WPI; 1999-469127/39.
 DR
 DR Nucleic acid sequences correlated with Rhesus weak D phenotype, useful
 PT for screening blood from donors and recipients for transfusion methods.
 PT
 XX Example; Page 33; 64pp; English.
 PS
 XX PCR primers AAX86523-62 were used for amplification and sequencing of
 CC exons of the Rhesus D (Rhd) antigen gene. The specification describes a
 CC Rhd contributing to or indicative of the weak D phenotype, where the Rhd
 CC polynucleotide carries at least one missense mutation as compared to the

CC wild-type RHD, in its transmembrane and/or intracellular regions,
 CC especially in amino acid positions 2-16, 114-149, 179-225 or/and 267-397,
 CC with the proviso that the D antigen does not carry a single missense
 CC mutation leading to a F223V or T283I substitution. The probes and
 CC antibodies are useful in the methods for detection of weak D phenotypes.
 CC Red blood cells, from probands, are useful for the assessment of the
 CC affinity, avidity and/or reactivity of monoclonal anti-D antibodies,
 CC polyclonal anti-D antisera or of anti-globulin or anti-human-globulin
 CC antisera. Detecting the presence of the RHD associated with weak D
 CC phenotype is useful for determining that a patient in need of a blood
 CC transfusion is to be transfused with RHD negative blood from a donor.
 CC Alternatively, testing for weak D phenotype RHD in the blood of a donor
 CC is useful for determining whether the donor blood should be excluded for
 CC transfusion to patients having wild type RHD or weak D types, other than
 CC that of the donor weak D type

XX SQ Sequence 19 BP; 6 A; 8 C; 1 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 14; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1705 ACCATTCTTCCCG 1718
 |||||
 Db 6 ACCATTCTTCCCG 19

RESULT 832

AA52733
 ID AAX52733 standard; DNA; 19 BP.

XX AC AAX52733;

DT 30-JUN-1999 (first entry)

XX Human genome biallelic marker primer 101.

XX Biallelic marker; human; high density disequilibrium map; disease; trait;
 KW identification; Alzheimer's disease; drug response; drug efficacy;
 KW drug toxicity; primer; ss.

XX Synthetic.

OS Homo sapiens.

XX WO9904038-A2.

PN 28-JAN-1999.

PD 17-JUL-1998; 98WO-IB001193.

PF 18-JUL-1997; 97EP-00401740.

PR 21-APR-1998; 98US-0082614P.

XX (GSET) GENSET.

XX Cohen D, Blumenfeld M, Tchoumakov I;

PI WPI; 1999-132278/11.

XX Production of biallelic markers - by obtaining a genomic DNA library,
 PT determining the order and sequence of DNA fragments and identifying
 PT nucleotides which vary between individuals.

PS Example 8; Page 228; 288pp; English.

XX This invention describes a novel method for obtaining a set of biallelic
 CC markers represented in AAX52533-X52632 and AAX52833-X52843 for use in
 CC constructing a high density equilibrium map of the human genome. The
 CC method involves (a) obtaining a nucleic acid library comprising genomic
 CC DNA fragments comprising the full genome or a portion (b) determining the
 CC order of genomic DNA fragments in the genome, (c) determining the
 CC sequence of selected regions of the genomic DNA fragments and (d)
 CC identifying nucleotides in the genomic DNA fragments which vary between

CC individuals, thereby defining a set of biallelic markers. The methods can
 CC be used for identifying traits such as disease (e.g. Alzheimer's
 CC disease), drug response, drug efficacy and drug toxicity. They can be
 CC used for selecting an individual for inclusion in a clinical trial. The
 CC method is used to map the position of genes in a genome (preferably the
 CC human genome). The sequences described in AAX52633-X52832 and AAX52844-
 CC X52868 represent primers used in the method of the invention

XX SQ Sequence 19 BP; 7 A; 3 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 14; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1001 CATATGACAGCT 1014
 |||||
 Db 5 CATATGACAGCT 18

RESULT 833

ABQ88421/c
 ID ABQ88421 standard; DNA; 19 BP.

XX AC ABQ88421;

XX 23-SEP-2002 (first entry)

XX Human GPCR forward PCR primer SEQ ID NO:134.

XX Human; G protein coupled receptor; GPCR; GPCR; neuroprotective;
 KW notropic; anti-HIV; antiasthmatic; antiarteriosclerotic; cytostatic;
 KW immunomodulator; antiinflammatory; antidiabetic; anorectic; haemostatic;
 KW antibacterial; fungicide; protozoal; virucide; nephrotropic; osteopathic;
 KW cardiant; antiulcer; antiallergic; hepatotropic; antiparkinsonian; HIV;
 KW vaccine; gene therapy; cell signal processing; cardiomyopathy; diabetes;
 KW metabolic pathway modulation; atherosclerosis; cancer; obesity; asthma;
 KW infection; Parkinson's disease; osteoporosis; Crohn's disease; ulcer;
 KW allergy; cirrhosis; glomerulonephritis; stroke; haematopoietic disorder;
 KW systemic lupus erythematosus; PCR primer; ss.

XX Homo sapiens.

OS Synthetic.

XX WO200250276-A2.

XX 27-JUN-2002.

XX 18-DEC-2001; 2001WO-US049347.

XX 18-DEC-2000; 2000US-0256635P.

XX 21-DEC-2000; 2000US-0257876P.

XX 04-JAN-2001; 2001US-0259743P.

XX 10-JAN-2001; 2001US-0260718P.

XX 12-JAN-2001; 2001US-0261498P.

XX 24-JAN-2001; 2001US-0263689P.

XX 08-FEB-2001; 2001US-0267464P.

XX 22-FEB-2001; 2001US-0271021P.

XX 14-MAR-2001; 2001US-0275946P.

XX 23-MAR-2001; 2001US-0278150P.

XX 18-APR-2001; 2001US-0284591P.

XX 23-APR-2001; 2001US-0285718P.

XX 19-JUN-2001; 2001US-0299327P.

XX 16-AUG-2001; 2001US-0312902P.

XX (CURA-) CURAGEN CORP.

XX Li L, Padigaru M, Ballinger RA, Kekuda R, Colman SD, Sciore P;
 PI Smthson G, Peyman JA, Macdougall JR, Stone D, Vernet CM, Shenoy S;
 PI Gunther E, Millet I, Tchervet V, Anderson D, Gusev V, Malyankar UM;
 PI Zhong H, Ellerman KE, Wolenc A;
 XX WPI; 2002-557660/59.

PT New isolated human G-protein coupled receptor X (GPCRX) polypeptide,
 PT useful for treating or preventing GPCR-associated disorders e.g.
 PT diabetes, atherosclerosis, cancer or obesity.
 PS Example 3; Page 126; 354pp; English.
 XX
 CC ABQ88354 to ABQ88417 represent human G protein coupled receptor (GPCR)
 CC cDNA sequences, and ABP51560 to ABP51624 represent human GPCR proteins
 CC from the present invention. GPCR sequences can have neuroprotective,
 CC neurotropic, anti-HIV, antiasthmatic, antiarteriosclerotic, cytostatic,
 CC immunomodulator, antiinflammatory, antidiabetic, anorectic, haemostatic,
 CC antibacterial, fungicide, protozoal, virucide, nephrotropic, osteopathic,
 CC cardiant, antiulcer, antiallergic, hepatotropic and antiparkinsonian
 CC activities, and can be used in vaccines and gene therapy. GPCR proteins,
 CC nucleic acid molecules, and antibodies from the present invention can be
 CC used for manufacturing a medicament for treating or preventing a GPCR-
 CC associated disorder or syndrome related to cell signal processing and
 CC metabolic pathway modulation, such as cardiomyopathy, atherosclerosis,
 CC diabetes, cancer, obesity, infections (bacterial, fungal, protozoal or
 CC viral), HIV, asthma, Parkinson's disease, osteoporosis, Crohn's disease,
 CC ulcers, allergies, cirrhosis, glomerulonephritis, stroke, systemic lupus
 CC erythematosus, or haematopoietic disorders. Anti-GPCR antibodies can be
 CC used diagnostically to monitor protein levels in tissues as part of a
 CC clinical testing procedure such as in determining the efficacy of a given
 CC treatment regimen. ABQ88418 to ABQ88639 represent PCR primers and probes
 CC for the human GPCRs of the present invention
 XX
 SQ Sequence 19 BP; 8 A; 4 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 14; DB 1; Length 19;
 Best Local Similarity 100.0%; Pred. No. 8.7e+02;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1974 TGCTGCTGCCCTCTGT 1987
 |||||
 DB 16 TGCTGCTGCCCTCTGT 3

RESULT 834
 ACA98739/c
 ID ACA98739 standard; DNA; 19 BP.
 XX ACA98739;
 AC ACA98739;
 XX
 DT 28-JUL-2003 (first entry)
 XX
 DE Human CYP2C8 SNP detection PCR primer #179.

Cytochrome P450 polypeptide 2C8; CYP2C8; arachidonic acid metabolism;
 cancer; cardiovascular disease; cytostatic; cardiovascular; gene therapy;
 single nucleotide polymorphism detection; SNP detection; PCR; primer; ss.

OS Homo sapiens.
 XX
 PN WO200299099-A2.
 XX
 PD 12-DEC-2002.

31-MAY-2002; 2002WO-EP006000.
 PF
 XX
 PR 01-JUN-2001; 2001EP-00112899.

(EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
 PA
 XX
 PI Penger A, Sprenger R, Brinkmann U;
 XX
 DR WPI; 2003-167344/16.

New polymorphic variants of the gene encoding Cytochrome P450 polypeptide
 2C8 (CYP2C8), useful for diagnosing or treating a disease, e.g.
 arachidonic acid metabolism, cancer or cardiovascular diseases.
 PS Example 2; Page 52; 178pp; English.

XX The invention describes a new polynucleotide comprises a polynucleotide:
 CC (a) having any of 101 nucleic acid sequences with 18-19 bp fully defined
 CC in the specification; (b) encoding any of seven polypeptides having 7
 CC amino acids, or a polypeptide with 3 amino acids; (c) capable of
 CC hybridising to a Cytochrome P450 polypeptide 2C8 (CYP2C8) gene; (d)
 CC encoding a molecular CYP2C8 variant polypeptide or its fragment. The
 CC polynucleotide, gene, vector, polypeptide or antibody is useful for
 CC diagnosing or treating a disease, for preparing a diagnostic composition
 CC for treating a disease, or for preparing a pharmaceutical composition
 CC for treating a disease. This disease includes arachidonic acid
 CC metabolism, cancer or cardiovascular diseases. This sequence represents a
 CC primer used to isolate regions of the human cytochrome P450 polypeptide
 CC 2C8 gene (CYP2C8) in order to identify the single nucleotide polymorphism
 CC (SNP) in that region of different individuals useful in disease diagnosis
 XX
 SQ Sequence 19 BP; 10 A; 0 C; 0 G; 8 T; 0 U; 1 Other;

Query Match 0.7%; Score 14; DB 1; Length 19;
 Best Local Similarity 87.5%; Pred. No. 8.7e+02;
 Matches 14; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

OY 1600 ATTATATATAAAATTT 1615
 |||||
 DB 16 ATTTTWTATAAAATTT 1

RESULT 835
 ACA98736
 ID ACA98736 standard; DNA; 19 BP.
 XX ACA98736;
 AC ACA98736;
 XX
 DT 28-JUL-2003 (first entry)
 XX
 DE Human CYP2C8 SNP detection PCR primer #176.

Cytochrome P450 polypeptide 2C8; CYP2C8; arachidonic acid metabolism;
 cancer; cardiovascular disease; cytostatic; cardiovascular; gene therapy;
 single nucleotide polymorphism detection; SNP detection; PCR; primer; ss.

OS Homo sapiens.
 XX
 PN WO200299099-A2.
 XX
 PD 12-DEC-2002.

31-MAY-2002; 2002WO-EP006000.
 PF
 XX
 PR 01-JUN-2001; 2001EP-00112899.

(EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
 PA
 XX
 PI Penger A, Sprenger R, Brinkmann U;
 XX
 DR WPI; 2003-167344/16.

New polymorphic variants of the gene encoding Cytochrome P450 polypeptide
 2C8 (CYP2C8), useful for diagnosing or treating a disease, e.g.
 arachidonic acid metabolism, cancer or cardiovascular diseases.

Example 2; Page 52; 178pp; English.

The invention describes a new polynucleotide comprises a polynucleotide:
 CC (a) having any of 101 nucleic acid sequences with 18-19 bp fully defined
 CC in the specification; (b) encoding any of seven polypeptides having 7
 CC amino acids, or a polypeptide with 3 amino acids; (c) capable of
 CC hybridising to a Cytochrome P450 polypeptide 2C8 (CYP2C8) gene; (d)
 CC encoding a molecular CYP2C8 variant polypeptide or its fragment. The
 CC polynucleotide, gene, vector, polypeptide or antibody is useful for
 CC diagnosing or treating a disease, for preparing a diagnostic composition
 CC for diagnosing a disease, or for preparing a pharmaceutical composition
 CC for treating a disease. This disease includes arachidonic acid

CC metabolism, cancer or cardiovascular diseases. This sequence represents a
 CC primer used to isolate regions of the human cytochrome P450 polypeptide
 CC 2C8 gene (CYP2C8) in order to identify the single nucleotide polymorphism
 CC (SNP) in that region of different individuals useful in disease diagnosis
 XX
 SQ Sequence 19 BP; 8 A; 0 C; 0 G; 10 T; 0 U; 1 Other;

Query Match 0.7%; Score 14; DB 1; Length 19;
 Best Local Similarity 87.5%; Pred. No. 8.7e+02;
 Matches 14; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1600 ATTATATATAAAATT 1615
 Db 4 ATTTTWTAAATTT 19

RESULT 836
 AAQ95585
 ID AAQ95585 standard; DNA; 20 BP.
 XX
 AC AAQ95585;
 DT 14-FEB-1996 (first entry)
 XX
 DE Primer B3 (Group 4, set C) for a human chromosomal marker.
 XX
 KW primer; polymerase chain reaction; PCR; linkage study; locus;
 KW microsatellite marker sequence; automated genotyping; allele;
 KW polymorphism; detection; Homo sapiens; ss.
 XX
 OS Synthetic.
 XX
 FN WO9515400-A1.
 XX
 PD 08-JUN-1995.
 XX
 PF 05-DEC-1994; 94WO-US013945.
 XX
 PR 03-DEC-1993; 93US-00160837.
 XX
 PA (UYJO) UNIV JOHNS HOPKINS.
 XX
 PI Levitt RC;
 XX
 DR WPI; 1995-215278/28.
 XX
 PT Kit for automated genotyping contg. pairs of PCR primers - designed to
 PT amplify polymorphic nucleotide repeat sequences, arranged in sets each
 PT with a characteristic fluorescence label, useful e.g. in detection of
 PT disease related genetic rearrangement.
 XX
 PS Disclosure; Fig 7D-3; 104pp; English.
 XX
 CC The method aims to provide a collection of highly reproducible
 CC microsatellite marker sequences (MMS) at approx. 10-50 cM intervals
 CC throughout the human genome which can be detectably labelled. The MMS are
 CC polymorphic, simple sequence repeats and can be used in automated
 CC genotyping. esp. fluorescence-based. The primers correspond to the unique
 CC DNA sequence surrounding each marker, and PCR is used to detect each
 CC polymorphism. When the MMS show considerable polymorphism (ie. a
 CC difference in the number of repeats) between individuals, the markers can
 CC be particularly informative. The MMS can be ideal for linkage studies.
 CC Kits comprise at least 4 groups of at least 3 sets, each comprising
 CC labelled primers for PCR amplification of the DNA. Group 4 primer pairs
 CC are shown in AAQ95465-480 and AAQ95559-590. The chromosomal markers,
 CC published size range of the allele and degree of heterozygosity in the
 CC population for the markers covered by these primer pairs are not given in
 CC the specification
 XX
 SQ Sequence 20 BP; 4 A; 3 C; 4 G; 9 T; 0 U; 0 Other;

Query Match 0.7%; Score 14; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 9.4e+02;

QY 1683 CTCCTCCAGGAGCC 1696
 Db 1 CTCCTCCAGGAGCC 14

RESULT 838
 AAC65053/C
 ID AAC65053 standard; DNA; 20 BP.
 XX
 AC AAC65053;
 XX
 DT 12-FEB-2001 (first entry)

Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 178 CATAATTTGCTGCT 191
 Db 1 CATAATTTGCTGCT 14

RESULT 837
 AAX92683
 ID AAX92683 standard; DNA; 20 BP.
 XX
 AC AAX92683;
 DT 13-SEP-1999 (first entry)
 XX
 DE PCR primer used to amplify an ORF of Chlamydia pneumoniae.
 XX
 KW Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
 KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
 KW neutralising epitope; PCR primer; ss.
 XX
 OS Synthetic.
 OS Chlamydophila pneumoniae.
 XX
 FN WO9927105-A2.
 XX
 PD 03-JUN-1999.
 XX
 PF 20-NOV-1998; 98WO-IB001890.
 XX
 PR 21-NOV-1997; 97FR-00014673.
 PR 04-NOV-1998; 98US-0107078P.
 XX
 PA (GEST) GENSET.
 XX
 PI Griffais R;
 XX
 DR WPI; 1999-357842/30.
 XX
 PT Genome sequence of Chlamydia pneumoniae.
 XX
 PS Page 1530; Disclosure; 1912pp; English.
 XX
 CC AAX91991-X97517 represent PCR primers used to amplify open reading frames
 CC and other nucleic acid sequences from the genome of Chlamydia pneumoniae
 CC (see AAX91990). C. pneumoniae causes respiratory disease such as
 CC pneumonia and bronchitis and is thought to be a contributing factor in
 CC heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema
 CC nodosum or pharyngitis. The polypeptides encoded by the open reading
 CC frames of the C. pneumoniae genome (see AAX94584- AAX35879) can be used
 CC in immunogenic compositions as vaccines. Vectors containing C. pneumoniae
 CC nucleotide sequences can also be used as immunogenic compositions,
 CC especially where the vector directs the expression of a neutralising
 CC epitope of C. pneumoniae
 XX
 SQ Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 14; DB 1; Length 20;
 Best Local Similarity 100.0%; Pred. No. 9.4e+02;
 Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1683 CTCCTCCAGGAGCC 1696
 Db 1 CTCCTCCAGGAGCC 14

RESULT 838
 AAC65053/C
 ID AAC65053 standard; DNA; 20 BP.
 XX
 AC AAC65053;
 XX
 DT 12-FEB-2001 (first entry)


```

XX DE Human bcl genes antisense sequence #6.
XX KW Antisense oligonucleotide; RNA molecule cleavage; immune activation; bcl;
XX KW Protein kinase C; PKC; PCR primer; ss.
XX OS Homo sapiens.
XX PN WO200061810-A1.
XX PD 19-OCT-2000.
XX PF 07-APR-2000; 2000WO-US009293.
XX PR 08-APR-1999; 99US-0128377P.
XX PA (OASI-) OASIS BIOSCIENCES INC.
XX PI Brown BD, Riley TA;
XX PS WPI; 2000-679502/66.
XX PT Antisense oligonucleotides containing degenerate and/or universal bases,
XX PT and modified backbone linkages is useful to target therapeutic genes,
XX PT preferably anti-apoptosis or chemoresistance genes.
XX PS Example 5; Fig 1; 32pp; English.
XX CC The present invention is concerned with antisense oligonucleotides
XX CC containing a number of degenerate bases and with a modified backbone
XX CC which can be used to direct cleavage of target RNA molecules. The use of
XX CC degenerate bases reduces the risk of immune activation following
XX CC injection into animals, which causes deleterious side effects associated
XX CC with many therapeutic antisense oligonucleotides. Sequences AAC65029-
XX CC C65077 are antisense oligonucleotides and PCR primers used in assays to
XX CC demonstrate the effects of the sequences of the invention
XX SQ Sequence 20 BP; 7 A; 6 C; 2 G; 3 T; 0 U; 2 Other;
      Query Match      0.7%; Score 14; DB 1; Length 20;
      Best Local Similarity 77.8%; Pred. No. 9.4e+02;
      Matches 14; Conservative 2; Mismatches 2; Indels 0; Gaps 0;
      Example 5; Fig 1; 32pp; English.
      The present invention is concerned with antisense oligonucleotides
      containing a number of degenerate bases and with a modified backbone
      which can be used to direct cleavage of target RNA molecules. The use of
      degenerate bases reduces the risk of immune activation following
      injection into animals, which causes deleterious side effects associated
      with many therapeutic antisense oligonucleotides. Sequences AAC65029-
      C65077 are antisense oligonucleotides and PCR primers used in assays to
      demonstrate the effects of the sequences of the invention
      OS Homo sapiens.
      WO2000153317-A1.
      26-JUL-2001.
      16-JAN-2001; 2001WO-US001475.
      20-JAN-2000; 2000US-00489869.

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PA (ISIS-) ISIS PHARM INC.
XX Murray SF, Cowsert LM, Wyatt JR;
XX WPI; 2001-451899/48.
XX PT New antisense compound(s) are useful to inhibit a nucleic acid molecule
XX PT encoding macrophage migration inhibitory factor.
XX PS Example 15; Page 82; 105pp; English.
XX CC The invention relates to antisense oligonucleotides 8-30 nucleotides in
XX CC length targeted to a nucleic acid molecule encoding macrophage migration
XX CC inhibitory factor (MMIF), where the antisense compound specifically
XX CC hybridizes with and inhibits the expression of MMIF. The antisense
XX CC nucleotides are useful for the treatment of a disease or condition
XX CC associated with MMIF such as neurological, hormonal, immune, inflammatory
XX CC or hyperproliferative disorder. Sequences AAH23191-268 represent chimeric
XX CC antisense phosphorothioate oligonucleotides used for inhibition of human
XX CC MMIF mRNA expression
XX SQ Sequence 20 BP; 2 A; 6 C; 8 G; 4 T; 0 U; 0 Other;
      Query Match      0.7%; Score 14; DB 1; Length 20;
      Best Local Similarity 100.0%; Pred. No. 9.4e+02;
      Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
      Example 15; Page 82; 105pp; English.
      The invention relates to antisense oligonucleotides 8-30 nucleotides in
      length targeted to a nucleic acid molecule encoding macrophage migration
      inhibitory factor (MMIF), where the antisense compound specifically
      hybridizes with and inhibits the expression of MMIF. The antisense
      nucleotides are useful for the treatment of a disease or condition
      associated with MMIF such as neurological, hormonal, immune, inflammatory
      or hyperproliferative disorder. Sequences AAH23191-268 represent chimeric
      antisense phosphorothioate oligonucleotides used for inhibition of human
      MMIF mRNA expression
      OS Homo sapiens.
      WO200222635-A1.
      21-MAR-2002.
      10-SEP-2001; 2001WO-US028235.
      11-SEP-2000; 2000US-00659791.
      (ISIS-) ISIS PHARM INC.
      Monia BP, Freier SM;
      WPI; 2002-404805/43.
      Novel antisense compound targeted to nucleic acid molecule encoding
      clusterin, useful for treating animal having disease associated with
      clusterin such as hyperlipidemic disorder, cardiovascular disorder.
      Claim 3; Page 83; 125pp; English.
      The invention comprises antisense oligonucleotides that are capable of
      inhibiting expression of the human clusterin gene. The antisense
      oligonucleotides of the invention are useful for inhibiting the
      expression of clusterin in cells. The antisense oligonucleotides are also

```

CC useful for treating an animal with a disease or condition associated with
CC clusterin (e.g. hypercholesterolaemia; cardiovascular disorders;
CC hyperproliferative disorders; and hyperlipidemic disorders). The present
CC DNA sequence represents a clusterin antisense oligonucleotide of the
CC invention. NOTE: The present DNA sequence has a phosphorothioate backbone
CC and also contains 2'-O-methoxyethyl wings
XX
SQ Sequence 20 BP; 3 A; 5 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.7%; Score 14; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 9.4e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1680 GAGCTCTTCAGGA 1693
|||
Db 16 GAGCTCTTCAGGA 3

RESULT 841

ABZ89443
ID ABZ89443 standard; DNA; 20 BP.

AC ABZ89443;

DT 17-OCT-2003 (first entry)

DE Human oligonucleotide sequence.

XX Human; antisense; lung dysfunction; nasal airway dysfunction;
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiasthmatic;
XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
XX antisense gene therapy; respiratory; lung; adenosine sensitivity;
XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
XX lung inflammation; respiratory disease; ds.

XX Homo sapiens.

XX W0200285308-A2.

XX 31-OCT-2002.

XX 23-APR-2002; 2002WO-US013135.

XX 24-APR-2001; 2001US-0286137P.

XX (EPIG-) EPIGENESIS PHARM INC.

XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX Miller S, Tang L, Shahabuddin S;

XX WPI; 2003-229219/22.

XX pharmaceutical composition for treating ailments associated with impaired
XX respiration, has oligo(s) antisense to specific gene(s) or its
XX corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
XX ubiquinone.

XX Disclosure, SEQ ID NO 4685; 872pp; English.

XX The invention relates to a novel pharmaceutical composition, which has a
XX first active agent comprising an oligonucleotide antisense to the
XX initiation codon, coding region, 5' or 3' end genomic flanking regions,
XX 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
XX junctions of genes encoding a polypeptide associated with lung and/or
XX nasal airway dysfunction and a second active agent comprising an
XX antiinflammatory steroid and ubiquinone. A composition of the invention
XX has antiinflammatory, antiasthmatic, antiasthmatic, hypotensive,
XX immunosuppressive, and cytostatic activity. The composition may have a
XX use in antisense gene therapy. The composition is useful for treating or
XX preventing a respiratory, lung or malignant disease or condition, also
XX for enhancing the prophylactic or therapeutic respiratory effect of an
XX antiinflammatory steroid in a subject, for reducing or depleting levels
XX of, or reducing sensitivity to adenosine, reducing levels of adenosine

CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 4 A; 1 C; 3 G; 12 T; 0 U; 0 Other;

Query Match 0.7%; Score 14; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 9.4e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1572 AGATTTTATATTTT 1585
|||
Db 1 AGATTTTATATTTT 14

RESULT 842

ADE14432/C
ID ADE14432 standard; DNA; 20 BP.

AC ADE14432;

DT 29-JAN-2004 (first entry)

DE HSD11B1 antisense oligonucleotide seq id 34.

XX osteopathic; antidepressant; anorectic; antidiabetic;
XX antiarteriosclerotic; antilipemic; antisense-therapy;
XX hydroxysteroid 11-beta dehydrogenase 1; osteoporosis; depression;
XX metabolic disorder; obesity; HSD11B1; diabetes; atherosclerosis;
XX hyperlipidaemia; antisense technology; human; ss.

XX Homo sapiens.

XX US2003198965-A1.

XX 23-OCT-2003.

XX 19-APR-2002; 2002US-00126355.

XX 19-APR-2002; 2002US-00126355.

XX (ISIS-) ISIS PHARM INC.

XX Freier SM;

XX WPI; 2003-852782/79.

XX New antisense compounds useful for treating disorders associated with
XX hydroxysteroid 11-beta dehydrogenase 1 expression, such as osteoporosis,
XX depression and metabolic disorders like obesity, diabetes and
XX atherosclerosis.

XX Claim 3; SEQ ID NO 34; 53pp; English.

XX The invention describes a compound (I) 8-80 nucleobases in length
XX targeted to a nucleic acid molecule encoding hydroxysteroid 11-beta
XX dehydrogenase 1, inhibiting expression of hydroxysteroid 11-beta
XX dehydrogenase 1. The methods and compositions of the present invention
XX are useful for treating disorders associated with hydroxysteroid 11-beta
XX dehydrogenase 1 expression, such as osteoporosis, depression and
XX metabolic disorders like obesity, diabetes, atherosclerosis and
XX hyperlipidaemia. This sequence represents an antisense oligonucleotide
XX used to control the expression of human hydroxysteroid 11-beta
XX dehydrogenase 1.

XX Sequence 20 BP; 7 A; 4 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 14; DB 1; Length 20;
Best Local Similarity 100.0%; Pred. No. 9.4e+02;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OS	Homo sapiens.
XX	
FN	WO200250096-A1.
XX	
PD	27-JUN-2002.
XX	
PF	20-DEC-2001; 2001WO-AU001648..
XX	
PR	20-DEC-2000; 2000AU-00002203..
XX	
PA	(BION-) BIONOMICS LTD.
XX	
PI	Wallace RH, Mulley JC, Berkovic SF;
XX	
DR	WPI; 2002-528445/56.
XX	
FT	New nucleic acid encoding mutant alpha subunit of a mammalian voltage-
PT	gated sodium channel, useful for diagnosis of epilepsy, particularly
PT	generalized epilepsy with febrile seizures plus.
XX	
PS	Example 3; Page 37; 198pp; English.
XX	
CC	The invention relates to a nucleic acid molecule encoding a mutant alpha
CC	subunit of a mammalian voltage-gated sodium channel. The DNA and the
CC	polypeptide may be used in the diagnosis of epilepsy, in particular
CC	generalised epilepsy with febrile seizures plus, and other disorders
CC	associated with sodium channel dysfunction. The polypeptide is useful for
CC	the screening of candidate pharmaceutical agents, where high throughput
CC	screening techniques are employed. The sequences are also useful in the
CC	manufacture of a medicament for the treatment of a disorder associated
CC	with sodium channel dysfunction such as epilepsy, particularly
CC	generalised epilepsy with febrile seizures plus, malignant hyperthermia,
CC	myasthenia, episodic ataxia, neuropathic and inflammatory pain.
CC	Alzheimer's disease, Parkinson's disease, schizophrenia, hyperekplexia
CC	and myotonia. Sequences ABK9848-ABK9823 represent PCR primers used to
CC	amplify DNA molecules encoding human sodium channel alpha 1-subunit
CC	(SCN1A) polypeptides of the invention
XX	
SQ	Sequence 21 BP; 5 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
Query Match	0.7%; Score 14; DB 1; Length 21;
Best Local Similarity	100.0%; Pred. No. 1e+03;
Matches	14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY	1053 CAATGACTACTTTG 1066 7 CAATGACTACTTTG 20
Db	
RESULT 845	
AAD24873/c	
ID	AAD24873 standard; DNA; 21 BP.
XX	
AC	AAD24873;
XX	
DT	12-MAR-2002 (first entry)
XX	
DE	Human fibulin-1D DNA amplifying PCR primer #1.
XX	
KW	Human; fibulin-1; endometriosis; female sterility; female birth control;
KW	uterine receptivity; gene therapy; antifertility; gynaecological;
KW	cytostatic; fibulin-1D; PCR primer; ss.
XX	
OS	Homo sapiens.
XX	
PN	WO200189548-A2.
XX	
PD	29-NOV-2001.
XX	
PF	24-MAY-2001; 2001WO-US016791.
XX	
PR	24-MAY-2000; 2000US-00577499.
XX	

OS	Homo sapiens.
XX	
FN	WO200250096-A1.
XX	
PD	27-JUN-2002.
XX	
PF	20-DEC-2001; 2001WO-AU001648..
XX	
PR	20-DEC-2000; 2000AU-00002203..
XX	
PA	(BION-) BIONOMICS LTD.
XX	
PI	Wallace RH, Mulley JC, Berkovic SF;
XX	
DR	WPI; 2002-528445/56.
XX	
FT	New nucleic acid encoding mutant alpha subunit of a mammalian voltage-
PT	gated sodium channel, useful for diagnosis of epilepsy, particularly
PT	generalized epilepsy with febrile seizures plus.
XX	
PS	Example 3; Page 37; 198pp; English.
XX	
CC	The invention relates to a nucleic acid molecule encoding a mutant alpha
CC	subunit of a mammalian voltage-gated sodium channel. The DNA and the
CC	polypeptide may be used in the diagnosis of epilepsy, in particular
CC	generalised epilepsy with febrile seizures plus, and other disorders
CC	associated with sodium channel dysfunction. The polypeptide is useful for
CC	the screening of candidate pharmaceutical agents, where high throughput
CC	screening techniques are employed. The sequences are also useful in the
CC	manufacture of a medicament for the treatment of a disorder associated
CC	with sodium channel dysfunction such as epilepsy, particularly
CC	generalised epilepsy with febrile seizures plus, malignant hyperthermia,
CC	myasthenia, episodic ataxia, neuropathic and inflammatory pain.
CC	Alzheimer's disease, Parkinson's disease, schizophrenia, hyperekplexia
CC	and myotonia. Sequences ABK9848-ABK9823 represent PCR primers used to
CC	amplify DNA molecules encoding human sodium channel alpha 1-subunit
CC	(SCN1A) polypeptides of the invention
XX	
SQ	Sequence 21 BP; 5 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
Query Match	0.7%; Score 14; DB 1; Length 21;
Best Local Similarity	100.0%; Pred. No. 1e+03;
Matches	14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY	101 ACTACTACGCGG 114 14 ACTACTACGCGG 1
Db	
RESULT 844	
ABK98910	
ID	ABK98910 standard; DNA; 21 BP.
XX	
AC	ABK98910;
XX	
DT	21-OCT-2002 (first entry)
XX	
DE	Human sodium channel alpha 1-subunit (SCN1A) DNA PCR primer #63.
XX	
KW	Human; sodium channel alpha 1-subunit; SCN1A; PCR; ss; episodic ataxia;
KW	epilepsy; generalised epilepsy with febrile seizures plus; myasthenia;
KW	sodium channel dysfunction; malignant hyperthermia; neuropathic pain;
KW	inflammatory pain; Alzheimer's disease; Parkinson's disease; myotonia;
KW	schizophrenia; hyperekplexia; anticonvulsant; analgesic; neuroprotective;
KW	nootropic; anti-Parkinsonian; neuroleptic; primer.
XX	

PA (SCHD) SCHERING AG.
PA (UYNC-) UNIV NORTH CAROLINA.
XX Hess-Stump H, Haendler B, Lessey B, Chwalisz K;
XX WPI; 2002-062479/08.
XX
XX Composition comprising a fibulin-1 nucleic acid, a fibulin-1 polypeptide,
PT or anti-fibulin-1 antibody, as active components, useful in female birth
PT control and for treatment and diagnosis of endometriosis.
XX
XX Example 3; Page 19; 44pp; English.
PS
XX The present invention relates to a pharmaceutical composition comprising
XX a fibulin-1 nucleic acid, a vector or cell containing fibulin-1, a
CC fibulin-1 polypeptide or an antibody against fibulin-1 protein, as active
CC components. The composition is useful for the diagnosis, treatment or
CC prevention of endometriosis, for the treatment of female sterility, for
CC female birth control, for detection of uterine receptivity and as an
CC agent for gene therapy. It is also useful for the identification of
CC agonists and/or antagonists of fibulin-1. The fibulin-1 antagonist is
CC useful for birth control. Fibulin-1 agonist is useful for treating
CC endometriosis and sterility. The present DNA sequence is a PCR primer
CC which is used for amplifying human fibulin-1D DNA
XX
XX Sequence 21 BP; 8 A; 6 C; 6 G; 1 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 14; DB 1; Length 21;
Best Local Similarity 100.0%; Pred. No. 1e+03;
Matches 14; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1986 GTCTGCTCTCTCT 1999
DB 21 GTCTGCTCTCTCT 8
RESULT 846
AAQ30400/C
ID AAQ30400 standard; DNA; 17 BP.
XX
XX AAQ30400;
AC
XX 25-MAR-2003 (revised)
DT 07-DEC-1992 (first entry)
XX
XX Oligomer IL2 403 for forming triplex with HUMIL2 target duplex.
XX Human interleukin- 2 gene; herpes simplex; AIDS; modified; HIV; RSV; HPV;
KW malignancy; hepatitis; inflammation; ss.
XX
XX Synthetic.
OS
XX Key Location/Qualifiers
FH modified_base 4 /tag= a
FT /mod_base= OTHER
FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
FT modified_base 8
FT /tag= b
FT /mod_base= OTHER
FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
FT modified_base 9
FT /tag= c
FT /mod_base= OTHER
FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
FT modified_base 11
FT /tag= d
FT /mod_base= OTHER
FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
FT modified_base 12
FT /tag= e
FT /mod_base= OTHER
FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"

XX WO9209705-A1.
XX
XX 11-JUN-1992.
PD
XX 25-NOV-1991; 91WO-US008811.
XX
XX 23-NOV-1990; 90US-00617907.
XX 18-JAN-1991; 91US-00643382.
XX 08-APR-1991; 91US-00683420.
XX 17-APR-1991; 91US-00686544.
XX 17-APR-1991; 91US-00686546.
XX 17-APR-1991; 91US-00686547.
XX 27-SEP-1991; 91US-00765733.
XX (GILE-) GILEAD SCI INC.
XX
XX Froehler B, Krawczyk S, Matteucci MD, Milligan J;
XX WPI; 1992-217083/26.
XX
XX New oligomers contg. modified bases - which form a triplex with G-C
PT doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,
PT herpes malignancy and inflammation.
XX
XX Claim 12; Page 71; 77pp; English.
XX
XX The synthetic oligomer is capable of forming a triplex at physiological
CC pH with a purine rich target sequence by coupling into the major groove
CC of the duplex. The specific target sequence of this oligomer is the human
CC interleukin-2 gene beginning at nucleotide 1114 contg. a purine rich
CC sequence concd. on one strand of the duplex. The oligomer, and others
CC like it are useful in diagnosis and therapy of diseases characterised by
CC specific DNA duplex targets, e.g. HPV; HER; HIV; hepatitis B, herpes,
CC malignant tumours and inflammation. The triple helices form under mild
CC conditions thus assays may be carried out without subjecting the test
CC specimen to harsh conditions. See also AAQ25452-25501 and AAQ30226-448.
CC (Updated on 25-MAR-2003 to correct PN field.)
XX
XX Sequence 17 BP; 5 A; 0 C; 0 G; 12 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 8e+02; 2; Indels 0; Gaps 0;
Matches 15; Conservative 0; Mismatches 2;
QY 1609 AAAAATTTATTAATATA 1625
DB 17 AAAAATTTATTAATATA 1
RESULT 847
AAT81558/C
ID AAT81558 standard; RNA; 17 BP.
XX
XX AAT81558;
AC
XX 14-DEC-1997 (first entry)
DT
XX Human c-myb hammerhead ribozyme target sequence (nt. position 2896).
DE Enzymatic nucleic acid; hammerhead; ribozyme; cleavage; human;
XX smooth muscle cell; hyperproliferation; restenosis; cancer; c-myb;
KW coronary angioplasty; ss.
XX
XX Homo sapiens.
OS
XX WO9531541-A2.
XX
XX 23-NOV-1995.
PD
XX 18-MAY-1995; 95WO-US006368.
XX
XX 18-MAY-1994; 94US-00245466.
XX

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PR 13-JAN-1995; 95US-00373124.
XX (RIBO-) RIBOZYME PHARM INC.
XX
XX Stinchcomb DT, Draper K, Mcswiggen J, Jarvis T;
XX WPI; 1996-010927/01.
XX
XX New enzymatic nucleic acid molecules - cleave RNA produced by e.g. c-myb,
XX for treating restenosis or cancer.
XX
XX Claim 1; Page 78; 128pp; English.
XX
XX The present sequence represents the preferred target sequence for an
XX enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves
XX the human c-myb sequence at the base position indicated in the descriptor
XX line. The c-myb sequence was screened for optimal ribozyme target sites
XX using a computer folding algorithm, and regions of the mRNA which did not
XX form secondary folding structures and contained potential ribozyme
XX cleavage sites were identified. Ribozymes were synthesised and their
XX activities optimised by either varying the length of the binding arms or
XX by modification to prevent degradation by nucleases. The ribozymes cleave
XX the c-myb sequence and can be used to prevent smooth muscle cell
XX hyperproliferation in restenosis, especially after coronary angioplasty,
XX and in cancers
XX
XX Sequence 17 BP; 7 A; 1 C; 0 G; 0 T; 9 U; 0 Other;
SQ
Query Match 0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. NO. 8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1595 TGTGTATTATATAAAA 1611
DB 17 TGTATATATATATAAA 1

RESULT 848
AAT90267/c
ID AAT90267 standard; DNA; 17 BP.
XX
XX AAT90267;
XX
XX 25-MAR-2003 (revised)
XX 03-DEC-1997 (first entry)
XX
XX Purine ring modified triplex forming oligonucleotide ON-33.
XX
XX Modification; triplex; duplex; nucleomonomer analogue; unsaturated group;
XX Purine ring; inhibition; gene expression; antisense; therapy; research;
XX diagnosis; probe; primer; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..17
XX /tag= a
XX /note= "all A are 6-methyl-2'-deoxyadenosine"
XX
XX US5645985-A.
XX
XX 08-JUL-1997.
XX
XX 25-NOV-1992; 92US-00976103.
XX
XX 26-NOV-1991; 91US-00799824.
XX 25-AUG-1992; 92US-00935444.
XX 23-OCT-1992; 92US-00965941.
XX
XX (GILE-) GILEAD SCI INC.
XX
XX Froehler B, Jones RJ, Gutierrez AJ, Matteucci M, Pudlo J;
XX Wagner R;

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XX
XX WPI; 1997-362920/33.
XX
XX Nucleo:monomers containing unsaturated pyrimidine base analogues - form
XX oligomer duplexes or triplexes with nucleic acid under physiological
XX conditions, and used in gene expression inhibition, diagnosis and assay.
XX
XX Example 17; Col 115-116; 104pp; English.
XX
XX The present sequence is a 6-methyl-2'-deoxyadenosine modified triplex
XX forming oligonucleotide, comprising nucleomonomer analogues of adenosine
XX containing an unsaturated group in the purine ring. The substituent
XX provides enhanced binding capacity in the formation of duplexes and
XX triplexes with single and double stranded RNA and DNA. Triplexes can be
XX formed at pH 7.0, i.e. under physiological pH conditions. The lipophilic
XX groups can also enhance cell permeation and uptake. The oligomer, which
XX also shows enhanced nuclease resistance, can be used to form duplexes and
XX triplexes as a normal oligomer, to inhibit gene expression, e.g. by its
XX antisense configuration, for therapeutic or research purposes, and for
XX diagnosis by providing probes or primers for specific RNA or DNA.
XX (Updated on 25-MAR-2003 to correct PF field.)
XX
XX Sequence 17 BP; 5 A; 0 C; 0 G; 12 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. NO. 8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1609 AAAATTATTAATAATA 1625
DB 17 AAAAATTATTAATAAA 1

RESULT 849
AAT90268/c
ID AAT90268 standard; DNA; 17 BP.
XX
XX AAT90268;
XX
XX 25-MAR-2003 (revised)
XX 03-DEC-1997 (first entry)
XX
XX Modified triplex forming oligonucleotide ON-34.
XX
XX Modification; triplex; duplex; nucleomonomer analogue; purine;
XX unsaturated group; pyrimidine; ring; inhibition; gene expression;
XX antisense; therapy; research; diagnosis; probe; primer; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 1..17
XX /tag= a
XX /note= "all A are 6-methyl-2'-deoxyadenosine all U are 5-
XX (1-propynyl)-2'-deoxyuridine"
XX
XX US5645985-A.
XX
XX 08-JUL-1997.
XX
XX 25-NOV-1992; 92US-00976103.
XX
XX 26-NOV-1991; 91US-00799824.
XX 25-AUG-1992; 92US-00935444.
XX 23-OCT-1992; 92US-00965941.
XX
XX (GILE-) GILEAD SCI INC.
XX
XX Froehler B, Jones RJ, Gutierrez AJ, Matteucci M, Pudlo J;
XX Wagner R;
XX
XX WPI; 1997-362920/33.
XX

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PT Nucleo:monomers containing unsaturated pyrimidine base analogues - form
PT oligomer duplexes or triplexes with nucleic acid under physiological
PT conditions, and used in gene expression inhibition, diagnosis and assay.
XX
XX Example 17; Col 119-120; 104pp; English.

XX The present sequence is a 6-methyl-2'-deoxyadenosine/5-(1-propynyl)-
CC 2'-deoxyuridine modified triplex forming oligonucleotide, comprising
CC nucleomonomer analogues of adenosine and uridine containing an
CC unsaturated group in the purine/pyrimidine ring. The substituents provide
CC enhanced binding capacity in the formation of duplexes and triplexes with
CC single and double stranded RNA and DNA. Triplexes can be formed at pH
CC 7.0, i.e. under physiological pH conditions. The lipophilic groups can
CC also enhance cell permeation and uptake. The oligomer, which also shows
CC enhanced nuclease resistance, can be used to form duplexes and triplexes
CC as a normal oligomer, to inhibit gene expression, e.g. by its antisense
CC configuration, for therapeutic or research purposes, and for diagnosis by
CC providing probes or primers for specific RNA or DNA. (Updated on 25-MAR-
CC 2003 to correct PF field.)

XX SQ Sequence 17 BP; 5 A; 0 C; 0 G; 0 T; 12 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1609 AAAATTATTAAATATA 1625
DB 17 AAAAATTATTAAATATA 1

RESULT 850

AAAX69652
ID AAX69652 standard; RNA; 17 BP.

XX AC AAX69652;

XX DT 28-JUL-1999 (first entry)

XX DE Human flt1 VEGF receptor hammerhead ribozyme substrate #947.

XX KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW foetal liver kinase 1; ss.

XX OS Homo sapiens.

XX PN WO9715662-A2.

XX PD 01-MAY-1997.

XX PF 25-OCT-1996; 96WO-US017480.

XX PR 26-OCT-1995; 95US-0005974P.

XX PR 11-JAN-1996; 96US-00584040.

XX PA (RIBO-) RIBOZYME PHARM INC.

XX PA (CHIR) CHIRON CORP.

XX PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;

XX DR WPI; 1997-259017/23.

XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT rheumatoid arthritis, etc., in a human patient.
XX
XX Claim 4; Page 75; 218pp; English.

XX The present invention describes nucleic acid molecules which modulate the
CC synthesis, expression and/or stability of a mRNA encoding 1 or more

CC receptors of vascular endothelial growth factor (VEGF). A patient
CC (preferably human) having a condition associated with the level of the
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC treated by administering the nucleic acid molecule or the expression
CC vector to the patient. AAX67275 to AAX75752 represent specific examples
CC of nucleic acid molecules from the present invention
XX
XX SQ Sequence 17 BP; 5 A; 4 C; 2 G; 0 T; 6 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 58.8%; Pred. No. 8e+02;
Matches 10; Conservative 5; Mismatches 2; Indels 0; Gaps 0;

QY 419 CAAGTCTGTGAAACTT 435

DB 1 CAACUGCUUUGAAACU 17

RESULT 851

AAAX72749/C
ID AAX72749 standard; RNA; 17 BP.

XX AC AAX72749;

XX DT 28-JUL-1999 (first entry)

XX DE Mouse flk-1 VEGF receptor hammerhead ribozyme substrate #182.

XX KW Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
KW foetal liver kinase 1; ss.

XX OS Mus sp.

XX PN WO9715662-A2.

XX PD 01-MAY-1997.

XX PF 25-OCT-1996; 96WO-US017480.

XX PR 26-OCT-1995; 95US-0005974P.

XX PR 11-JAN-1996; 96US-00584040.

XX PA (RIBO-) RIBOZYME PHARM INC.

XX PA (CHIR) CHIRON CORP.

XX PI Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;

XX DR WPI; 1997-259017/23.

XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
PT rheumatoid arthritis, etc., in a human patient.

XX PS Claim 4; Page 128; 218pp; English.

XX The present invention describes nucleic acid molecules which modulate the
CC synthesis, expression and/or stability of a mRNA encoding 1 or more
CC receptors of vascular endothelial growth factor (VEGF). A patient
CC (preferably human) having a condition associated with the level of the
CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
CC treated by administering the nucleic acid molecule or the expression
CC vector to the patient. AAX67275 to AAX75752 represent specific examples
CC of nucleic acid molecules from the present invention
XX
XX SQ Sequence 17 BP; 9 A; 1 C; 3 G; 0 T; 4 U; 0 Other;

```

Query Match          0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1579 ATATTTCTATTTCTCT 1595
DB 17 AAAAGTTCTATTTCTCT 1

RESULT 852
AAX62803
ID AAX62803 standard; RNA; 17 BP.
XX
AC AAX62803;
XX
DT 16-JUL-1999 (first entry)
XX
DE Delta-9 desaturase hamerhead ribozyme target SEQ ID NO:678.
XX
KW Maize; corn; Zea mays; delta-9 desaturase; GBSS; target; substrate;
KW granule bound starch synthase; hamerhead ribozyme; hairpin ribozyme;
KW modulation; gene expression; transgenic plant; cleavage; canola plant;
KW caffeine synthesis; coffee plant; nicotine production; tobacco;
KW fruit ripening; flower pigmentation; lignin production; ss.
XX
OS Zea mays.
XX
PN WO9710328-A2.
XX
PD 20-MAR-1997.
XX
PF 12-JUL-1996; 96WO-US011689.
XX
PR 13-JUL-1995; 95US-0001135P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PA (DOWC) DOWELANCO.
XX
PI Zwick MG, Edington BE, Mcswiggen JA, Merlo PAO, Guo L, Skokut TA;
PI Young SA, Folkerts O, Merlo DJ;
XX
DR WPI; 1997-202224/18.
XX
PT Ribozyme which modulates plant gene expression - preferably modulates
PT expression of DELTA-9 desaturase or granule bound starch synthase in
PT maize or canola.
XX
PS Claim 38; Page 85; 155pp; English.
XX
CC The present invention describes an enzymatic nucleic acid molecule (I)
CC with RNA cleaving activity, which modulates the expression of a plant
CC gene. Also described is a gene comprising a cDNA sequence encoding maize
CC Delta-9 desaturase. (I) can be used to modulate expression of a gene,
CC preferably Delta-9 desaturase or a granule bound starch synthase (GBSS)
CC gene, in a plant (preferably a maize or canola plant). (I) can be used to
CC modulate caffeine synthesis in a coffee plant, nicotine production in a
CC tobacco plant, fruit ripening processes in an apple, tomato, pear, plum
CC or peach plant, flower pigmentation in a rose, petunia, chrysanthemum or
CC marigold plant or lignin production in a tobacco, aspen, poplar or pine
CC plant
XX
SQ Sequence 17 BP; 2 A; 8 C; 2 G; 0 T; 5 U; 0 Other;

Query Match          0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 64.7%; Pred. No. 8e+02;
Matches 11; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

QY 1941 CTTCCACTGGCTCAAA 1957
DB 1 CUUCCAUUGGCCUCCA 17

RESULT 853
Query Match          0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1579 ATATTTCTATTTCTCT 1595
DB 17 AAAAGTTCTATTTCTCT 1

RESULT 854
AAX63011
ID AAX63011 standard; RNA; 17 BP.
XX
AC AAX63011;
XX
DT 16-JUL-1999 (first entry)
XX
DE Delta-9 desaturase hamerhead ribozyme target SEQ ID NO:886.
XX
KW Maize; corn; Zea mays; delta-9 desaturase; GBSS; target; substrate;
KW granule bound starch synthase; hamerhead ribozyme; hairpin ribozyme;
KW modulation; gene expression; transgenic plant; cleavage; canola plant;
KW caffeine synthesis; coffee plant; nicotine production; tobacco;
KW fruit ripening; flower pigmentation; lignin production; ss.
XX
OS Zea mays.
XX
PN WO9710328-A2.
XX
PD 20-MAR-1997.
XX
PF 12-JUL-1996; 96WO-US011689.
XX
PR 13-JUL-1995; 95US-0001135P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PA (DOWC) DOWELANCO.
XX
PI Zwick MG, Edington BE, Mcswiggen JA, Merlo PAO, Guo L, Skokut TA;
PI Young SA, Folkerts O, Merlo DJ;
XX
DR WPI; 1997-202224/18.
XX
PT Ribozyme which modulates plant gene expression - preferably modulates
PT expression of DELTA-9 desaturase or granule bound starch synthase in
PT maize or canola.
XX
PS Claim 38; Page 87; 155pp; English.
XX
CC The present invention describes an enzymatic nucleic acid molecule (I)
CC with RNA cleaving activity, which modulates the expression of a plant
CC gene. Also described is a gene comprising a cDNA sequence encoding maize
CC Delta-9 desaturase. (I) can be used to modulate expression of a gene,
CC preferably Delta-9 desaturase or a granule bound starch synthase (GBSS)
CC gene, in a plant (preferably a maize or canola plant). (I) can be used to
CC modulate caffeine synthesis in a coffee plant, nicotine production in a
CC tobacco plant, fruit ripening processes in an apple, tomato, pear, plum
CC or peach plant, flower pigmentation in a rose, petunia, chrysanthemum or
CC marigold plant or lignin production in a tobacco, aspen, poplar or pine
CC plant
XX
SQ Sequence 17 BP; 2 A; 1 C; 2 G; 0 T; 12 U; 0 Other;

Query Match          0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 23.5%; Pred. No. 8e+02;
Matches 4; Conservative 11; Mismatches 2; Indels 0; Gaps 0;

QY 1580 TATTTCTATTTCTCTG 1596
DB 1 UAUUUUGUAUUUUUCUG 17

RESULT 854
AAX17513/c
ID AAX17513 standard; RNA; 17 BP.
XX
AC AAX17513;
XX
DT 19-JUN-2000 (first entry)
XX
DE Aryl hydrocarbon nuclear transport substrate sequence SEQ ID NO:739.
XX
KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;

```

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KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
KW hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
KW dermatologic; RNA cleavage; cancer; diabetic retinopathy; arthritis;
KW age related macular degeneration; inflammation; neovascular glaucoma;
KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
KW tuberos scleriosis; pot-wine stain; Sturge Weber syndrome;
KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
XX Homo sapiens.
XX OS
XX PN W09950403-A2.
XX PD 07-OCT-1999.
XX PF 24-MAR-1999; 99WO-US006507.
XX PR 27-MAR-1998; 98US-0079678P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
XX WPI; 1999-591315/50.
XX DR
XX PT Novel ribozymes for modulating the synthesis, expression and/or stability
XX of an mRNA encoding an angiogenic factors.
XX PS Claim 53; Page 84; 305pp; English.
XX CC The present invention describes enzymatic nucleic acid molecules with RNA
CC cleaving activity, which specifically cleave RNA encoded by an aryl
CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
CC and AAA19155 to AAA19222 represent their corresponding target sequences;
CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
CC AAA21596 to AAA21688 represent their corresponding target sequences;
CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequences
CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
CC AAA23422 represent their corresponding target sequences. The ribozymes of
CC the invention are used for modulating the synthesis, expression and/or
CC stability of an mRNA encoding angiogenic factor, especially ARNT,
CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
CC especially used to treat cancer, diabetic retinopathy, age related
CC macular degeneration (ARMD), inflammation, and arthritis, as well as
CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
CC angiofibroma of tuberous scleriosis, pot-wine stains, Sturge Weber
CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
CC and other syndromes and diseases related to the levels of ARNT, Tie-2,
CC integrin subunit alpha-6, or integrin subunit beta-3
XX Sequence 17 BP; 3 A; 7 C; 1 G; 0 T; 6 U; 0 Other;
SQ Query Match 0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1328 ATTCTGAAGAGAGGGA 1344
Db 17 ATTCTGAAGAGGGA 1
RESULT 855
AA21210/c
ID AAA21210 standard; RNA; 17 BP.
XX
AC AAA21210;
XX

DT 19-JUN-2000 (first entry)
XX Integrin alpha 6 subunit substrate sequence SEQ ID NO:4436.
DE
XX Human; aryl hydrocarbon nuclear transporter; ARNT; Tie-2; angiogenesis;
KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
KW hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
KW dermatologic; RNA cleavage; cancer; diabetic retinopathy; arthritis;
KW age related macular degeneration; inflammation; neovascular glaucoma;
KW myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
KW tuberos scleriosis; pot-wine stain; Sturge Weber syndrome;
KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
XX Homo sapiens.
XX OS
XX PN W09950403-A2.
XX PD 07-OCT-1999.
XX PF 24-MAR-1999; 99WO-US006507.
XX PR 27-MAR-1998; 98US-0079678P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
XX WPI; 1999-591315/50.
XX DR
XX PT Novel ribozymes for modulating the synthesis, expression and/or stability
XX of an mRNA encoding an angiogenic factors.
XX PS Claim 55; Page 194; 305pp; English.
XX CC The present invention describes enzymatic nucleic acid molecules with RNA
CC cleaving activity, which specifically cleave RNA encoded by an aryl
CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3
CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to
CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,
CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their
CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to
CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086
CC and AAA19155 to AAA19222 represent their corresponding target sequences;
CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme
CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and
CC AAA21596 to AAA21688 represent their corresponding target sequences;
CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequences
CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
CC AAA23422 represent their corresponding target sequences. The ribozymes of
CC the invention are used for modulating the synthesis, expression and/or
CC stability of an mRNA encoding angiogenic factor, especially ARNT,
CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
CC especially used to treat cancer, diabetic retinopathy, age related
CC macular degeneration (ARMD), inflammation, and arthritis, as well as
CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
CC angiofibroma of tuberous scleriosis, pot-wine stains, Sturge Weber
CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
CC and other syndromes and diseases related to the levels of ARNT, Tie-2,
CC integrin subunit alpha-6, or integrin subunit beta-3
XX Sequence 17 BP; 4 A; 3 C; 2 G; 0 T; 8 U; 0 Other;
SQ Query Match 0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1891 AGGCTTCCTAAAGTAAACA 1907
Db 17 AGGCTTCCTAAAGTAAACA 1
RESULT 856


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AAA35998/c
ID AAA35998 standard; DNA; 17 BP.
AC AAA35998;
XX
DT 26-JUL-2000 (first entry)
XX
DE Human genomic SNP allele specific oligonucleotide SEQ ID NO:55.
XX
KW Human; single nucleotide polymorphism; SNP; genotyping; DNA analysis;
KW allele specific oligonucleotide; ASO; reduced complexity genome; RCG;
KW genomic classification; identification; DNA fingerprinting;
KW tumour characterisation; hybridisation; ss.
XX
OS Homo sapiens.
XX
PN WO200018960-A2.
XX
PD 06-APR-2000.
XX
PF 24-SEP-1999; 99WO-US022283.
XX
PR 25-SEP-1998; 98US-0101757P.
XX
PS (MASI ) MASSACHUSETTS INST TECHNOLOGY.
XX
PI Landers JE, Jordan B, Housman DE, Charest A;
XX
DR WPI; 2000-293181/25.
XX
PT Detection of single nucleotide polymorphisms in genomes by preparation
PT and analysis of reduced complexity genomes, useful for genotyping,
PT fingerprinting and determining allele frequency of SNPs.
XX
PS Disclosure; Page 55; 111pp; English.
XX
CC A method has been developed for detecting the presence or absence of a
CC single nucleotide polymorphism (SNP) allele in a genomic sample. The
CC method comprises preparing a reduced complexity genome (RCG) from the
CC genomic sample and analysing the RCG for the presence or absence of a SNP
CC allele. The method can be used to characterise a tumour, to generate a
CC genomic pattern for an individual genome or to generate a genomic
CC classification code for a genome. The method can be used to assess
CC whether a subject is at risk for developing a disease or to identify a
CC set of SNP alleles associated with a disease. The method can also be used
CC to perform linkage analysis. AAA35944 to AAA35947 represent sequences
CC used in the exemplification of the present invention. AAA35948 to
CC AAA36632 represent nucleotide sequences containing SNPs
XX
SQ Sequence 17 BP; 6 A; 6 C; 4 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1855 GGGTGGCTGGGTCCTCA 1871
DB 17 GCGTGGCTGGGTCCTCA 1

RESULT 857
AAA35999/c
ID AAA35999 standard; DNA; 17 BP.
AC AAA35999;
XX
DT 26-JUL-2000 (first entry)
XX
DE Human genomic SNP allele specific oligonucleotide SEQ ID NO:56.
XX
KW Human; single nucleotide polymorphism; SNP; genotyping; DNA analysis;
KW allele specific oligonucleotide; ASO; reduced complexity genome; RCG;
KW genomic classification; identification; DNA fingerprinting;

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KW tumour characterisation; hybridisation; ss.
XX Homo sapiens.
XX WO200018960-A2.
XX 06-APR-2000.
XX 24-SEP-1999; 99WO-US022283.
XX 25-SEP-1998; 98US-0101757P.
XX (MASI ) MASSACHUSETTS INST TECHNOLOGY.
XX Landers JE, Jordan B, Housman DE, Charest A;
XX WPI; 2000-293181/25.
XX Detection of single nucleotide polymorphisms in genomes by preparation
XX and analysis of reduced complexity genomes, useful for genotyping,
XX fingerprinting and determining allele frequency of SNPs.
XX Disclosure; Page 55; 111pp; English.
XX A method has been developed for detecting the presence or absence of a
XX single nucleotide polymorphism (SNP) allele in a genomic sample. The
XX method comprises preparing a reduced complexity genome (RCG) from the
XX genomic sample and analysing the RCG for the presence or absence of a SNP
XX allele. The method can be used to characterise a tumour, to generate a
XX genomic pattern for an individual genome or to generate a genomic
XX classification code for a genome. The method can be used to assess
XX whether a subject is at risk for developing a disease or to identify a
XX set of SNP alleles associated with a disease. The method can also be used
XX to perform linkage analysis. AAA35944 to AAA35947 represent sequences
XX used in the exemplification of the present invention. AAA35948 to
XX AAA36632 represent nucleotide sequences containing SNPs
XX
SQ Sequence 17 BP; 5 A; 6 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1855 GGGTGGCTGGGTCCTCA 1871
DB 17 GCGTGGCTGGGTCCTCA 1

RESULT 858
AAA24906/c
ID AAA24906 standard; DNA; 17 BP.
XX
AC AAA24906;
XX
DT 19-JUL-2000 (first entry)
XX
DE Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:1404.
XX
KW Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage;
KW hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;
KW gene expression modification; cancer; phosphorothioate; endonuclease;
KW anticancer; breast cancer; endometrium cancer; ss.
XX
OS Homo sapiens.
XX
PN WO9954459-A2.
XX
PD 28-OCT-1999.
XX
PF 19-APR-1999; 99WO-US008547.
XX
PR 20-APR-1998; 98US-0082404P.
PR 23-JUN-1998; 98US-00103636.

```

XX (RIBO-) RIBOZYME PHARM INC.
 XX Thompson JD, Beigelman L, Mcswiggen JA, Karpeisky A, Bellon L;
 PI Reynolds M, Zwick M, Jarvis T, Woolf T, Haeblerli P;
 PI Matulic-Adamic J;
 XX WPI; 2000-013248/01.
 DR New nucleic acids that interact, and optionally cleave, target sequences,
 XX used to treat cancer.
 PT Claim 77; Page 62; 148pp; English.
 XX The present invention describes nucleic acids (A) that interact stably
 CC with a target sequence and contain at least one phosphorodithioate
 CC link, having endonuclease activity. (A), and more generally any catalytic
 CC nucleic acid (A') that modulates expression of the oestrogen receptor
 CC gene, are used to treat cancer (particularly of breast or endometrium),
 CC in vivo or by transforming cells ex vivo and implanting treated cells, or
 CC for other conditions associated with levels of oestrogen receptor.
 CC Because of the high selectivity for targeted RNA, (A) can also be used to
 CC correlate inhibition of gene expression with alterations in phenotype,
 CC particularly for identification of therapeutic targets, and as research
 CC reagents (for RNA, in the same way that restriction endonucleases are
 CC used with DNA). The combination of modifications in (A) improves
 CC resistance to nucleases, binding affinity and/or activity. AAA23503 to
 CC AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and
 CC AAA24748 to AAA25992 represent their corresponding target sequences.
 CC AAA25993 to AAA26105 represent oestrogen receptor hairpin ribozyme
 CC sequences, and AAA26107 to AAA26218 represent their corresponding target
 CC sequences. AAA26219 to AAA26271 represent other ribozyme sequences and
 CC antisense oligonucleotides used in the exemplification of the present
 CC invention
 XX
 SQ Sequence 17 BP; 4 A; 5 C; 3 G; 5 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.8; DB 1; Length 17;
 Best Local Similarity 88.2%; Pred. No. 8e+02; Indels 0; Gaps 0;
 Matches 15; Conservative 0; Mismatches 2;
 QY 1841 GACATCTCTAGAGGGG 1857
 Db 17 GCACATCTCTAGAGGTG 1
 RESULT 859
 AAF05528/C
 ID AAF05528 standard; DNA; 17 BP.
 XX AAF05528;
 AC AAF05528;
 DT 16-FEB-2001 (first entry)
 DE Hammerhead ribozyme substrate #2747.
 XX Ribozyme; erythropoietin; granulocyte colony stimulating factor;
 KW interferon alpha; ss.
 XX Homo sapiens.
 OS WO2000061729-A2.
 FN 19-OCT-2000.
 PD 11-APR-2000; 2000WO-US009721.
 PF 12-APR-1999; 99US-0129390P.
 PR (RIBO-) RIBOZYME PHARM INC.
 PA Blatt L, Zwick M, Pavco P, Mcswiggen J;
 PI WPI; 2000-647423/62.
 XX Enzymatic and antisense nucleic acid inhibition of repressor genes,
 XX useful for producing e.g. granulocyte colony stimulating factor protein,
 XX interferon alpha and erythropoietin.
 PS Claim 18; Page 118; 164pp; English.
 XX The present invention relates to enzymatic and antisense nucleic acid
 CC molecules that act as inhibitors of the expression of repressor genes
 CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
 CC factor gene, IRF-2 and/or the CAAT Displacement Protein (CDP).
 CC Inhibition of the repressors removes prevents inhibition (and
 CC consequently increases expression of) genes involved in the production of
 CC erythropoietin, granulocyte colony stimulating factor protein and
 CC interferon alpha
 XX Sequence 17 BP; 8 A; 0 C; 1 G; 8 T; 0 U; 0 Other;
 SQ Query Match 0.7%; Score 13.8; DB 1; Length 17;
 Best Local Similarity 88.2%; Pred. No. 8e+02; Indels 0; Gaps 0;
 Matches 15; Conservative 0; Mismatches 2;
 QY 1602 TTATATATAAAATTATT 1618
 Db 17 TTATATCAAAATATT 1
 RESULT 860
 AAF05527/C
 ID AAF05527 standard; DNA; 17 BP.
 XX AAF05527;
 AC AAF05527;
 DT 16-FEB-2001 (first entry)
 DE Hammerhead ribozyme substrate #2746.
 XX Ribozyme; erythropoietin; granulocyte colony stimulating factor;
 KW interferon alpha; ss.
 XX Homo sapiens.
 OS WO2000061729-A2.
 FN 19-OCT-2000.
 PD 11-APR-2000; 2000WO-US009721.
 PF 12-APR-1999; 99US-0129390P.
 PR (RIBO-) RIBOZYME PHARM INC.
 PA Blatt L, Zwick M, Pavco P, Mcswiggen J;
 PI WPI; 2000-647423/62.
 XX Enzymatic and antisense nucleic acid inhibition of repressor genes,
 XX useful for producing e.g. granulocyte colony stimulating factor protein,
 XX interferon alpha and erythropoietin.
 PS Claim 18; Page 118; 164pp; English.
 XX The present invention relates to enzymatic and antisense nucleic acid
 CC molecules that act as inhibitors of the expression of repressor genes
 CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
 CC factor gene, IRF-2 and/or the CAAT Displacement Protein (CDP).
 CC Inhibition of the repressors removes prevents inhibition (and
 CC consequently increases expression of) genes involved in the production of
 CC erythropoietin, granulocyte colony stimulating factor protein and
 CC interferon alpha
 XX Sequence 17 BP; 7 A; 0 C; 1 G; 9 T; 0 U; 0 Other;
 SQ

DR WPI; 2000-647423/62.
 XX Enzymatic and antisense nucleic acid inhibition of repressor genes,
 XX useful for producing e.g. granulocyte colony stimulating factor protein,
 PT interferon alpha and erythropoietin.
 PT Claim 18; Page 118; 164pp; English.
 XX The present invention relates to enzymatic and antisense nucleic acid
 CC molecules that act as inhibitors of the expression of repressor genes
 CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
 CC factor gene, IRF-2 and/or the CAAT Displacement Protein (CDP).
 CC Inhibition of the repressors removes prevents inhibition (and
 CC consequently increases expression of) genes involved in the production of
 CC erythropoietin, granulocyte colony stimulating factor protein and
 CC interferon alpha
 XX Sequence 17 BP; 8 A; 0 C; 1 G; 8 T; 0 U; 0 Other;
 SQ Query Match 0.7%; Score 13.8; DB 1; Length 17;
 Best Local Similarity 88.2%; Pred. No. 8e+02; Indels 0; Gaps 0;
 Matches 15; Conservative 0; Mismatches 2;
 QY 1602 TTATATATAAAATTATT 1618
 Db 17 TTATATCAAAATATT 1
 RESULT 860
 AAF05527/C
 ID AAF05527 standard; DNA; 17 BP.
 XX AAF05527;
 AC AAF05527;
 DT 16-FEB-2001 (first entry)
 DE Hammerhead ribozyme substrate #2746.
 XX Ribozyme; erythropoietin; granulocyte colony stimulating factor;
 KW interferon alpha; ss.
 XX Homo sapiens.
 OS WO2000061729-A2.
 FN 19-OCT-2000.
 PD 11-APR-2000; 2000WO-US009721.
 PF 12-APR-1999; 99US-0129390P.
 PR (RIBO-) RIBOZYME PHARM INC.
 PA Blatt L, Zwick M, Pavco P, Mcswiggen J;
 PI WPI; 2000-647423/62.
 XX Enzymatic and antisense nucleic acid inhibition of repressor genes,
 XX useful for producing e.g. granulocyte colony stimulating factor protein,
 PT interferon alpha and erythropoietin.
 PS Claim 18; Page 118; 164pp; English.
 XX The present invention relates to enzymatic and antisense nucleic acid
 CC molecules that act as inhibitors of the expression of repressor genes
 CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
 CC factor gene, IRF-2 and/or the CAAT Displacement Protein (CDP).
 CC Inhibition of the repressors removes prevents inhibition (and
 CC consequently increases expression of) genes involved in the production of
 CC erythropoietin, granulocyte colony stimulating factor protein and
 CC interferon alpha
 XX Sequence 17 BP; 7 A; 0 C; 1 G; 9 T; 0 U; 0 Other;
 SQ

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Query Match      0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 8e+02; 2; Indels 0; Gaps 0;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1603 TATATAAAATTTATTA 1619
DB 17 TATATCAAAAATTATTA 1

RESULT 861
ABL46462
ID ABL46462 standard; RNA; 17 BP.
XX
AC ABL46462;
XX
DT 27-JUN-2003 (first entry)
XX
DE Human GRID hammerhead ribozyme substrate oligonucleotide #95.
XX
KW Human; Grb2-related with Insert Domain; GRID; T-cell;
KW co-stimulatory adaptor protein; tissue rejection; graft rejection;
KW leukaemia; cytostatic; ss.
XX
OS Homo sapiens.
XX
PN WO200162911-A2.
XX
PD 30-AUG-2001.
XX
PF 23-FEB-2001; 2001WO-US005957.
XX
PR 24-FEB-2000; 2000US-0184594P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI (GLAXO) GLAXO GROUP LTD.
XX
PI Jarvis T, Von Carlowitz I, Mcswiggen JA, Hamblin PA, Ellis JH;
XX WPI; 2001-550088/61.
XX
PT New nucleic acid(s) for regulating the Grb2-related with Insert Domain
PT (GRID) gene comprises using antisense and enzymatic nucleic acid
PT molecules such as hammerhead ribozymes.
XX
PS Claim 4; Page 61; 108pp; English.
XX
CC The present invention relates to oligonucleotides that downregulate the
CC expression of human Grb2-related with Insert Domain (GRID) gene. GRID is
CC a T-cell co-stimulatory adaptor protein. The oligonucleotides are useful
CC for modulating the expression of GRID, to treat conditions such as
CC tissue/graft rejection and leukaemia. The oligonucleotides can also be
CC administered in conjunction with other therapies such as radiation,
CC chemotherapy and cyclosporin treatment. The present oligonucleotide was
CC used to illustrate the invention
XX
SQ Sequence 17 BP; 2 A; 6 C; 3 G; 0 T; 6 U; 0 Other;

Query Match      0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 64.7%; Pred. No. 8e+02;
Matches 11; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

QY 1515 GGACCTCTCCAGCTCTG 1531
DB 1 GGACUUCUCCAUUCUC 17

RESULT 862
ABN08955/c
ID ABN08955 standard; DNA; 17 BP.
XX
AC ABN08955;
XX

```

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DT 29-MAY-2002 (first entry)
XX
DE Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8947.
XX
KW Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
XX
OS Homo sapiens.
XX
PN WO200192524-A2.
XX
PD 06-DEC-2001.
XX
PF 25-MAY-2001; 2001WO-US016981.
XX
PR 26-MAY-2000; 2000US-0207456P.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
XX
XX (AEOM-) AEOMICA INC.
XX
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon MB;
XX WPI; 2002-179446/23.
XX
DR
XX
PT New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
PT or as specific biomolecule capture probes for surface-enhanced laser
PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.
XX
PS Disclosure; SEQ ID NO 8947; 214pp; English.
XX
CC The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
CC nucleic acids can be used as probes to detect, characterise and quantify
CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMPLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption/ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMPLP-1, in particular heart
CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIFO
CC at ftp.wipo.int/pub/published_pct_sequence
XX
SQ Sequence 17 BP; 4 A; 4 C; 7 G; 0 T; 0 U; 0 Other;

Query Match      0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```

QY 1679 TCAGCTCTTCCAGGAC 1695
 Db 17 TCAGCTCTTCCAGGCG 1

RESULT 863
 ABN06570
 ID ABN06570 standard; DNA; 17 BP.
 XX AC
 XX ABN06570;
 XX 29-MAY-2002 (first entry)
 XX DE Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:6562.
 XX KW Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
 KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
 KW skeletal muscle disorder; amplicon; screening; ss.
 XX OS Homo sapiens.
 XX PN WO200192524-A2.
 XX PD 06-DEC-2001.
 XX PF 25-MAY-2001; 2001WO-US016981.
 XX PR 26-MAY-2000; 2000US-0207456P.
 XX PR 21-SEP-2000; 2000US-0234687P.
 XX PR 27-SEP-2000; 2000US-0236359P.
 XX PR 04-OCT-2000; 2000GB-00024263.
 XX PR 30-JAN-2001; 2001WO-US000661.
 XX PR 30-JAN-2001; 2001WO-US000662.
 XX PR 30-JAN-2001; 2001WO-US000663.
 XX PR 30-JAN-2001; 2001WO-US000664.
 XX PR 30-JAN-2001; 2001WO-US000665.
 XX PR 30-JAN-2001; 2001WO-US000666.
 XX PR 30-JAN-2001; 2001WO-US000667.
 XX PR 30-JAN-2001; 2001WO-US000668.
 XX PR 30-JAN-2001; 2001WO-US000669.
 XX PR 30-JAN-2001; 2001WO-US000670.
 XX PR 05-FEB-2001; 2001US-0266860P.
 XX PA (AEOM-) AEOMICA INC.
 XX PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
 XX WPI; 2002-179446/23.
 XX DR New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
 PT or as specific biomolecule capture probes for surface-enhanced laser
 PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.
 XX PS Disclosure; SEQ ID NO 6562; 214pp; English.
 XX PS The present invention describes a human genome-derived myosin-like
 CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
 CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
 CC nucleic acids can be used as probes to detect, characterise and quantify
 CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
 CC provide initial substrates for the recombinant engineering of hGDMPLP-1
 CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
 CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
 CC -1 proteins, as standards in assays used to determine the concentration
 CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
 CC capture probes for surface-enhanced laser desorption ionisation, as
 CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
 CC production, and in vaccines or for replacement therapy. The
 CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
 CC disorder associated with the expression of hGDMPLP-1, in particular heart
 CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
 CC The present sequence represents an oligomer used in the screening of the

CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
 CC The sequence data for this patent did not form part of the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequence

XX SQ Sequence 17 BP; 3 A; 6 C; 4 G; 4 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.8; DB 1; Length 17;
 Best Local Similarity 88.2%; Pred. No. 8e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1011 AGCTGTGGCCCTGGATA 1027
 Db 1 ACCTGTGGCCCTGGATA 17

RESULT 864
 ABN07092
 ID ABN07092 standard; DNA; 17 BP.
 XX AC
 XX ABN07092;
 XX 29-MAY-2002 (first entry)
 XX DE Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:7084.
 XX KW Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
 KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
 KW skeletal muscle disorder; amplicon; screening; ss.
 XX OS Homo sapiens.
 XX PN WO200192524-A2.
 XX PD 06-DEC-2001.
 XX PF 25-MAY-2001; 2001WO-US016981.
 XX PR 26-MAY-2000; 2000US-0207456P.
 XX PR 21-SEP-2000; 2000US-0234687P.
 XX PR 27-SEP-2000; 2000US-0236359P.
 XX PR 04-OCT-2000; 2000GB-00024263.
 XX PR 30-JAN-2001; 2001WO-US000661.
 XX PR 30-JAN-2001; 2001WO-US000662.
 XX PR 30-JAN-2001; 2001WO-US000663.
 XX PR 30-JAN-2001; 2001WO-US000664.
 XX PR 30-JAN-2001; 2001WO-US000665.
 XX PR 30-JAN-2001; 2001WO-US000666.
 XX PR 30-JAN-2001; 2001WO-US000667.
 XX PR 30-JAN-2001; 2001WO-US000668.
 XX PR 30-JAN-2001; 2001WO-US000669.
 XX PR 30-JAN-2001; 2001WO-US000670.
 XX PR 05-FEB-2001; 2001US-0266860P.
 XX PA (AEOM-) AEOMICA INC.
 XX PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
 XX WPI; 2002-179446/23.
 XX DR New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
 PT or as specific biomolecule capture probes for surface-enhanced laser
 PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.
 XX PS Disclosure; SEQ ID NO 7084; 214pp; English.
 XX PS The present invention describes a human genome-derived myosin-like
 CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
 CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
 CC nucleic acids can be used as probes to detect, characterise and quantify
 CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
 CC provide initial substrates for the recombinant engineering of hGDMPLP-1
 CC protein variants having desired phenotypic improvements, and for
 CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
 CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
 CC -1 proteins, as standards in assays used to determine the concentration
 CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
 CC capture probes for surface-enhanced laser desorption ionisation, as
 CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
 CC production, and in vaccines or for replacement therapy. The
 CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
 CC disorder associated with the expression of hGDMPLP-1, in particular heart
 CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
 CC The present sequence represents an oligomer used in the screening of the

CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
 CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
 CC -1 proteins, as standards in assays used to determine the concentration
 CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
 CC capture probes for surface-enhanced laser desorption/ionisation, as
 CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
 CC production, and in vaccines or for replacement therapy. The
 CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
 CC disorder associated with the expression of hGDMPLP-1, in particular heart
 CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
 CC The present sequence represents an oligomer used in the screening of the
 CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
 CC The sequence data for this patent did not form part of the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequence
 XX
 SQ Sequence 17 BP; 6 A; 3 C; 8 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 17;
 Best Local Similarity 88.2%; Pred. No. 8e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1455 AACCAAGGAGGAGGAGC 1471
 Db 1 AGCCAAGGAGGAGGAGC 17

RESULT 865
 ABN08676
 ID ABN08676 standard; DNA; 17 BP.
 AC ABN08676;
 XX
 XX 29-MAY-2002 (first entry)
 DT
 DE Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8665.
 XX
 KW Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
 KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
 KW skeletal muscle disorder; amplicon; screening; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200192524-A2.
 XX
 PD 06-DEC-2001.
 XX
 PF 25-MAY-2001; 2001WO-US016981.
 XX

26-MAY-2000; 2000US-0207456P.
 PR 21-SEP-2000; 2000US-0234687P.
 PR 27-SEP-2000; 2000US-0236359P.
 PR 04-OCT-2000; 2000GB-00024263.
 PR 30-JAN-2001; 2001WO-US000661.
 PR 30-JAN-2001; 2001WO-US000662.
 PR 30-JAN-2001; 2001WO-US000663.
 PR 30-JAN-2001; 2001WO-US000664.
 PR 30-JAN-2001; 2001WO-US000665.
 PR 30-JAN-2001; 2001WO-US000666.
 PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 30-JAN-2001; 2001WO-US000669.
 PR 05-FEB-2001; 2001WO-US000670.
 XX 05-FEB-2001; 2001US-0266860P.
 XX (AEOM-) AEOMICA INC.
 XX
 PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
 XX
 DR WPI; 2002-179446/23.
 XX
 PT New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
 PT or as specific biomolecule capture probes for surface-enhanced laser

PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.
 XX
 PS Disclosure; SEQ ID NO 8668; 214pp; English.
 XX
 CC The present invention describes a human genome-derived myosin-like
 CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
 CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
 CC nucleic acids can be used as probes to detect, characterise and quantify
 CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
 CC provide initial substrates for the recombinant engineering of hGDMPLP-1
 CC protein variants having desired phenotypic improvements, and for
 CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
 CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
 CC -1 proteins, as standards in assays used to determine the concentration
 CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
 CC capture probes for surface-enhanced laser desorption/ionisation, as
 CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
 CC production, and in vaccines or for replacement therapy. The
 CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
 CC disorder associated with the expression of hGDMPLP-1, in particular heart
 CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
 CC The present sequence represents an oligomer used in the screening of the
 CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
 CC The sequence data for this patent did not form part of the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequence
 XX
 SQ Sequence 17 BP; 8 A; 3 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 17;
 Best Local Similarity 88.2%; Pred. No. 8e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1455 AACCAAGGAGGAGGAGC 1471
 Db 1 AGCCAAGGAGGAGGAGC 17

RESULT 866
 ABN08675
 ID ABN08675 standard; DNA; 17 BP.
 AC ABN08675;
 XX
 XX 29-MAY-2002 (first entry)
 DT
 DE Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8667.
 XX
 KW Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
 KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
 KW skeletal muscle disorder; amplicon; screening; ss.
 OS Homo sapiens.
 XX
 PN WO200192524-A2.
 XX
 PD 06-DEC-2001.
 XX
 PF 25-MAY-2001; 2001WO-US016981.
 XX
 PR 26-MAY-2000; 2000US-0207456P.
 PR 21-SEP-2000; 2000US-0234687P.
 PR 27-SEP-2000; 2000US-0236359P.
 PR 04-OCT-2000; 2000GB-00024263.
 PR 30-JAN-2001; 2001WO-US000661.
 PR 30-JAN-2001; 2001WO-US000662.
 PR 30-JAN-2001; 2001WO-US000663.
 PR 30-JAN-2001; 2001WO-US000664.
 PR 30-JAN-2001; 2001WO-US000665.
 PR 30-JAN-2001; 2001WO-US000666.
 PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 30-JAN-2001; 2001WO-US000669.

PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
PA (AEOM-) AEOMICA INC.
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX WPI; 2002-179446/23.
XX
XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
PT or as specific biomolecule capture probes for surface-enhanced laser
PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.
XX
XX Disclosure; SEQ ID NO 8667; 214pp; English.
XX
XX The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
CC nucleic acids can be used as probes to detect, characterise and quantify
CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMPLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption/ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMPLP-1, in particular heart
CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX
XX SQ Sequence 17 BP; 9 A; 2 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1454 AAACCAAGGAGGAGGAGG 1470
Db 1 AAGCCCAAGGAGGAGGAGG 17

RESULT 867
ABN08952/c
ID ABN08952 standard; DNA; 17 BP.
XX
XX AC ABN08952;
XX
XX DT 29-MAY-2002 (first entry)
XX
XX DE Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8944.
XX
XX Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
XX
XX OS Homo sapiens.
XX
XX PN WO200192524-A2.
XX
XX PD 06-DEC-2001.
XX
XX PF 25-MAY-2001; 2001WO-US016981.
XX
XX PR 26-MAY-2000; 2000US-0207456P.
XX
XX PR 21-SEP-2000; 2000US-0234687P.

PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0266860P.
XX
XX (AEOM-) AEOMICA INC.
XX
XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
PI WPI; 2002-179446/23.
XX
XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
PT or as specific biomolecule capture probes for surface-enhanced laser
PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.
XX
XX Disclosure; SEQ ID NO 8944; 214pp; English.
XX
XX The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
CC nucleic acids can be used as probes to detect, characterise and quantify
CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMPLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption/ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMPLP-1, in particular heart
CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX
XX SQ Sequence 17 BP; 3 A; 5 C; 8 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1682 GCTTTCAGGAGGAGGAGG 1698
Db 17 GCTTTCAGGAGGAGGAGG 1

RESULT 868
ABQ63445
ID ABQ63445 standard; DNA; 17 BP.
XX
XX AC ABQ63445;
XX
XX DT 20-AUG-2002 (first entry)
XX
XX DE Human KTOM1a portion (ABQ63232) probe # 158.
XX
XX Human; KTOM1a; KTOM1; kidney tumour overexpressed membrane; cytostatic;
KW gene therapy; cancer; kidney; liver; bone marrow; heart; lung;
KW kidney; colon; skeletal muscle; testis; uterus; placenta; probe; ss.

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XX OS Homo sapiens.
XX OS WO200224750-A2.
XX PN 28-MAR-2002.
XX PD
XX PF 21-SEP-2001; 2001WO-US029656.
XX PR 21-SEP-2000; 2000US-0234687P.
XX PR 27-SEP-2000; 2000US-0236359P.
XX PR 04-OCT-2000; 2000GB-00024263.
XX PR 30-JAN-2001; 2001WO-US000661.
XX PR 30-JAN-2001; 2001WO-US000662.
XX PR 30-JAN-2001; 2001WO-US000663.
XX PR 30-JAN-2001; 2001WO-US000664.
XX PR 30-JAN-2001; 2001WO-US000665.
XX PR 30-JAN-2001; 2001WO-US000666.
XX PR 30-JAN-2001; 2001WO-US000667.
XX PR 30-JAN-2001; 2001WO-US000668.
XX PR 30-JAN-2001; 2001WO-US000669.
XX PR 30-JAN-2001; 2001WO-US000670.
XX PR 23-MAY-2001; 2001US-00864761.
XX PR 28-AUG-2001; 2001US-0315676P.
XX PA (AEOM-) AEOMICA INC.
XX PI Zhang J;
XX PI WPI; 2002-479509/51.
XX DR
XX PT New human kidney tumor overexpressed membrane (KTOM1) protein and nucleic
XX PT acids encoding the protein, useful for treating subjects having defects
XX PT in KTOM1 which can manifest as cancer of the kidney, or as a disorder of
XX PT e.g., liver or bone.
XX PS Example 2; Page 178; 418pp; English.
XX CC The invention relates to a novel isolated nucleic acid encoding human
XX CC KTOM1 (kidney tumour overexpressed membrane) protein. The protein of the
XX CC invention has cytotostatic activity. The nucleotide may have a use in gene
XX CC therapy. The KTOM1 nucleic acids may be used to diagnose, treat or
XX CC monitor a disease caused by altered expression of human KTOM1.
XX CC Compositions comprising the nucleic acids, proteins or antibodies may be
XX CC used to treat subjects having defects in KTOM1 which can manifest as
XX CC cancer of the kidney, as well as a disorder of liver, bone marrow, brain,
XX CC heart, lung, kidney, colon, skeletal muscle, testis, uterus and placenta
XX CC function. The sequence represents a probe used in the invention to scan
XX CC the nt 1-1001 portion of human KTOM1a (ABQ63232)
XX SQ Sequence 17 BP; 3 A; 9 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1536 CCTGCTGAGTCCCTCAC 1552
Dbb 1 CCTGCTGACTCCAC 17

RESULT 869
ABQ64007/c
ID ABQ64007 standard; DNA; 17 BP.
XX AC ABQ64007;
XX DT 20-AUG-2002 (first entry)
XX DE Human KTOM1a portion (ABQ63232) probe # 720.
XX KW Human; KTOM1a; KTOM1; kidney tumour overexpressed membrane; cytotostatic;
XX KW gene therapy; cancer; kidney; liver; bone marrow; brain; heart; lung;

```

```

KW Kidney; colon; skeletal muscle; testis; uterus; placenta; probe; ss.
XX OS Homo sapiens.
XX OS WO200224750-A2.
XX PN 28-MAR-2002.
XX PD
XX PF 21-SEP-2001; 2001WO-US029656.
XX PR 21-SEP-2000; 2000US-0234687P.
XX PR 27-SEP-2000; 2000US-0236359P.
XX PR 04-OCT-2000; 2000GB-00024263.
XX PR 30-JAN-2001; 2001WO-US000661.
XX PR 30-JAN-2001; 2001WO-US000662.
XX PR 30-JAN-2001; 2001WO-US000663.
XX PR 30-JAN-2001; 2001WO-US000664.
XX PR 30-JAN-2001; 2001WO-US000665.
XX PR 30-JAN-2001; 2001WO-US000666.
XX PR 30-JAN-2001; 2001WO-US000667.
XX PR 30-JAN-2001; 2001WO-US000668.
XX PR 30-JAN-2001; 2001WO-US000669.
XX PR 30-JAN-2001; 2001WO-US000670.
XX PR 23-MAY-2001; 2001US-00864761.
XX PR 28-AUG-2001; 2001US-0315676P.
XX PA (AEOM-) AEOMICA INC.
XX PI Zhang J;
XX PI WPI; 2002-479509/51.
XX DR
XX PT New human kidney tumor overexpressed membrane (KTOM1) protein and nucleic
XX PT acids encoding the protein, useful for treating subjects having defects
XX PT in KTOM1 which can manifest as cancer of the kidney, or as a disorder of
XX PT e.g., liver or bone.
XX PS Example 2; Page 252; 418pp; English.
XX CC The invention relates to a novel isolated nucleic acid encoding human
XX CC KTOM1 (kidney tumour overexpressed membrane) protein. The protein of the
XX CC invention has cytotostatic activity. The nucleotide may have a use in gene
XX CC therapy. The KTOM1 nucleic acids may be used to diagnose, treat or
XX CC monitor a disease caused by altered expression of human KTOM1.
XX CC Compositions comprising the nucleic acids, proteins or antibodies may be
XX CC used to treat subjects having defects in KTOM1 which can manifest as
XX CC cancer of the kidney, as well as a disorder of liver, bone marrow, brain,
XX CC heart, lung, kidney, colon, skeletal muscle, testis, uterus and placenta
XX CC function. The sequence represents a probe used in the invention to scan
XX CC the nt 1-1001 portion of human KTOM1a (ABQ63232)
XX SQ Sequence 17 BP; 1 A; 6 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1196 GGGTCCAAATCGAGCG 1212
Dbb 17 GGCACCAATCGAGCG 1

RESULT 870
ABV80613
ID ABV80613 standard; DNA; 17 BP.
XX AC ABV80613;
XX DT 03-JAN-2003 (first entry)
XX DE Human HTPL scanning oligonucleotide SEQ ID 1859.
XX KW Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;

```



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XX DE Human HTPL scanning oligonucleotide SEQ ID 1860.
XX DT
XX DE Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
KW Human testis expressed Patched like protein; testis; adrenal; liver;
KW male germ cell development; bone marrow; brain; kidney; lung; placenta;
KW prostate; skeletal muscle; colon; male infertility; cancer; ss.
XX OS Homo sapiens.
XX PN EP1229046-A2.
XX PD 07-AUG-2002.
XX PF 28-JAN-2002; 2002EP-00001167.
XX PR 30-JAN-2001; 2001WO-US000663.
XX PR 30-JAN-2001; 2001WO-US000664.
XX PR 30-JAN-2001; 2001WO-US000665.
XX PR 30-JAN-2001; 2001WO-US000667.
XX PR 30-JAN-2001; 2001WO-US000668.
XX PR 23-MAY-2001; 2001US-00864761.
XX PR 09-OCT-2001; 2001US-0327898P.
XX PA (AEOM-) AEOMICA INC.
XX PI Zhan J;
XX PI WPI; 2002-676582/73.
XX DR Novel isolated human testis expressed Patched like protein (HTPL), useful
XX PT for identifying agonist and antagonist and specific binding partners, and
XX PT for treating subjects having defects in HTPL.
XX PS Example 2; Page 307; 718pp; English.
XX PS The present invention relates to human testis expressed Patched like
XX CC protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL
XX CC has two isoforms, with a few single base pair differences between the
XX CC two. One of the single base pair changes introduces a premature stop
XX CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
XX CC shares an overall structure organisation with the Patched protein. The
XX CC shared structural features strongly imply that HTPL plays a role similar
XX CC to that of Patched, and is a potential tumour suppressor. HTPL is
XX CC important in regulating male germ cell development, and the HTPL gene was
XX CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are
XX CC useful for diagnosing a disorder caused by mutation in HTPL, and in
XX CC therapy and manufacture of a medicament for treatment or prevention of
XX CC such disorder associated with decreased expression or activity of human
XX CC HTPL. Such disorders include disorders of testis, or adrenal, adult and
XX CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
XX CC skeletal muscle or colon function. HTPL proteins and nucleic acids are
XX CC clinically useful diagnostic markers and potential therapeutic agents for
XX CC male infertility and cancer. The present oligonucleotide was used in an
XX CC example from the invention
XX SQ Sequence 17 BP; 4 A; 1 C; 2 G; 10 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2035 TTTTCAGATACTATTTT 2051
Db 1 TTTTAGAGACTATTTT 17
RESULT 873
ABV79344
ID ABV79344 standard; DNA; 17 BP.
XX AC ABV79344;

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```

XX DT 03-JAN-2003 (first entry)
XX DE Human HTPL scanning oligonucleotide SEQ ID 590.
XX KW Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1;
XX KW human testis expressed Patched like protein; testis; adrenal; liver;
XX KW male germ cell development; bone marrow; brain; kidney; lung; placenta;
XX KW prostate; skeletal muscle; colon; male infertility; cancer; ss.
XX OS Homo sapiens.
XX PN EP1229046-A2.
XX PD 07-AUG-2002.
XX PF 28-JAN-2002; 2002EP-00001167.
XX PR 30-JAN-2001; 2001WO-US000663.
XX PR 30-JAN-2001; 2001WO-US000664.
XX PR 30-JAN-2001; 2001WO-US000665.
XX PR 30-JAN-2001; 2001WO-US000667.
XX PR 30-JAN-2001; 2001WO-US000668.
XX PR 23-MAY-2001; 2001US-00864761.
XX PR 09-OCT-2001; 2001US-0327898P.
XX PA (AEOM-) AEOMICA INC.
XX PI Zhan J;
XX PI WPI; 2002-676582/73.
XX DR Novel isolated human testis expressed Patched like protein (HTPL), useful
XX PT for identifying agonist and antagonist and specific binding partners, and
XX PT for treating subjects having defects in HTPL.
XX PS Example 2; Page 141; 718pp; English.
XX PS The present invention relates to human testis expressed Patched like
XX CC protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL
XX CC has two isoforms, with a few single base pair differences between the
XX CC two. One of the single base pair changes introduces a premature stop
XX CC codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL
XX CC shares an overall structure organisation with the Patched protein. The
XX CC shared structural features strongly imply that HTPL plays a role similar
XX CC to that of Patched, and is a potential tumour suppressor. HTPL is
XX CC important in regulating male germ cell development, and the HTPL gene was
XX CC mapped to human chromosome 10p12.1. HTPL and its coding sequence are
XX CC useful for diagnosing a disorder caused by mutation in HTPL, and in
XX CC therapy and manufacture of a medicament for treatment or prevention of
XX CC such disorder associated with decreased expression or activity of human
XX CC HTPL. Such disorders include disorders of testis, or adrenal, adult and
XX CC foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,
XX CC skeletal muscle or colon function. HTPL proteins and nucleic acids are
XX CC clinically useful diagnostic markers and potential therapeutic agents for
XX CC male infertility and cancer. The present oligonucleotide was used in an
XX CC example from the invention
XX SQ Sequence 17 BP; 7 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1411 GAGAAAGACCCAGAGGA 1427
Db 1 GAGGAGACCTAGAGGA 17
RESULT 874
ABV79345
ID ABV79345 standard; DNA; 17 BP.

```


CC ABK17354-ABK22719 represent nucleic acids, including antisense and
 CC enzymatic nucleic acid molecules which regulate expression of ERG, and
 CC related PCR primers of the invention
 XX
 SQ Sequence 17 BP; 4 A; 5 C; 2 G; 0 T; 6 U; 0 Other;
 Query Match 0.7%; Score 13.8; DB 1; Length 17;
 Best Local Similarity 58.8%; Pred. NO. 8e+02; 2; Indels 0; Gaps 0;
 Matches 10; Conservative 5; Mismatches 2; Indels 0; Gaps 0;
 QY 95 TCTGTTACTACTACGAC 111
 Db 1 UCCGUUACUACUAGAC 17
 RESULT 878
 ABN85838
 ID ABN85838 standard; DNA; 17 BP.
 XX
 AC ABN85838;
 XX
 DT 03-SEP-2002 (first entry)
 XX
 DE Related to Bombyx mori silk fibroin primer #38.
 XX
 KW Silk; fibroin; textile industry; PCR; primer; ss.
 XX
 OS Unidentified.
 XX
 PN WO200240528-A1.
 XX
 XX 23-MAY-2002.
 XX
 XX 26-OCT-2001; 2001WO-CN001506.
 XX
 XX 26-OCT-2000; 2000CN-00125859.
 XX
 XX (SHAN-) SHANGHAI BIO-CHEM INST CHINESE ACAD SCI.
 XX
 XX Lu C, Huang J, Zhao Y, Zhang F, Chen X;
 XX WPI; 2002-427084/45.
 XX
 XX Method for producing non-natural silk by Bombyx mori with modifying heavy
 PT and light chains of fibroin in natural silk by DNA recombination
 PT technology and protein engineering, applicable in sericulture and textile
 PT industry.
 XX
 PS Example 3; Page 18; 50pp; Chinese.
 XX
 CC This invention relates to a silk which constitutes recombinant Bombyx
 CC mori silk fibroin obtained by modification or variation at the heavy or
 CC light chains of the fibroin. The method is for producing non-natural
 CC silk, which is applicable in sericulture and textile industry. Such
 CC modified silk has improved performance. The present sequence is a primer
 CC related to the invention
 XX
 SQ Sequence 17 BP; 4 A; 2 C; 7 G; 4 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.8; DB 1; Length 17;
 Best Local Similarity 88.2%; Pred. NO. 8e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 753 CGGGATTGATGACGAGT 769
 Db 1 CAGGGTTGATGACGAGT 17
 RESULT 879
 AAD41892/c
 ID AAD41892 standard; RNA; 17 BP.
 XX
 AC AAD41892;
 XX

XX 30-OCT-2002 (first entry)
 DT ON-34 oligonucleotide used in the exemplification of the invention.
 DE
 XX Antisense therapy; infection; cardiovascular disorder; immune reaction;
 KW gene therapy; virucide; cytostatic; antibacterial; antiinflammatory;
 KW cancer; cardiant; ss.
 XX Unidentified.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..3
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "5-(1-propynyl)-2'-deoxyuridine; This base is
 FT given as N in the sequence shown as SEQ ID NO: 39 in the
 FT sequence listing"
 FT 4
 FT modified_base
 FT /tag= b
 FT /mod_base= OTHER
 FT /note= "8-oxo-N6-methyl 2'-deoxyadenosine; This base is
 FT given as N in the sequence shown as SEQ ID NO: 39 in the
 FT sequence listing"
 FT 5..7
 FT modified_base
 FT /tag= c
 FT /mod_base= OTHER
 FT /note= "5-(1-propynyl)-2'-deoxyuridine; This base is
 FT given as N in the sequence shown as SEQ ID NO: 39 in the
 FT sequence listing"
 FT 8..9
 FT modified_base
 FT /tag= d
 FT /mod_base= OTHER
 FT /note= "8-oxo-N6-methyl 2'-deoxyadenosine; This base is
 FT given as N in the sequence shown as SEQ ID NO: 39 in the
 FT sequence listing"
 FT 10
 FT modified_base
 FT /tag= e
 FT /mod_base= OTHER
 FT /note= "5-(1-propynyl)-2'-deoxyuridine; This base is
 FT given as N in the sequence shown as SEQ ID NO: 39 in the
 FT sequence listing"
 FT 11..12
 FT modified_base
 FT /tag= f
 FT /mod_base= OTHER
 FT /note= "8-oxo-N6-methyl 2'-deoxyadenosine; This base is
 FT given as N in the sequence shown as SEQ ID NO: 39 in the
 FT sequence listing"
 FT 13..17
 FT modified_base
 FT /tag= g
 FT /mod_base= OTHER
 FT /note= "5-(1-propynyl)-2'-deoxyuridine; This base is
 FT given as N in the sequence shown as SEQ ID NO: 39 in the
 FT sequence listing"
 XX USG380368-B1.
 XX
 XX 30-APR-2002.
 XX
 XX 12-FEB-1996; 96US-00599738.
 XX
 XX 26-NOV-1991; 91US-00799824.
 PR 25-AUG-1992; 92US-00935444.
 PR 23-OCT-1992; 92US-00965941.
 PR 25-NOV-1992; 92US-00976103.
 PR 14-NOV-1994; 94US-00338352.
 XX
 XX (ISIS-) ISIS PHARM INC.
 XX
 XX Froehner B, Wagner R, Mattencci M, Jones RJ, Gutierrez AJ;
 PI Pudlo J;
 XX
 XX WPI; 2002-535437/57.
 DR

PR 09-AUG-2000; 2000US-0224383P.
XX (RIBO-) RIBOZYME PHARM INC.
PA (SYNT) SYNTAX USA LLC.
PA (THOM/) THOMPSON J.
XX Thompson J, Mcswiggen J, Mckenzie T, Ayers D, Szymkowski DE;
PI Grupe A;
XX WPI; 2002-217145/27.
XX Enzymatic polynucleotide that down regulates expression of chloride
PT channel calcium activated gene, useful for treating Chronic obstructive
PT pulmonary disease (COPD), chronic bronchitis and asthma.
XX Claim 4; Page 54; 152pp; English.
XX The invention relates to enzymatic nucleic acid molecules that down
CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes
CC by cleaving RNA derived from the genes. The nucleic acid sequences are
CC useful as pharmaceutical agents for treating conditions such as chronic
CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic
CC fibrosis, obstructive bowel syndrome and any other diseases or conditions
CC that are related to or will respond to the levels of CLCA1 in a cell or
CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,
CC hence, are useful for treatment of a patient having a condition
CC associated with the level of CLCA1, where the invention further comprises
CC the use of one or more therapies under conditions suitable for the
CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,
CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The
CC nucleic acids of the invention are also used as diagnostic tools to
CC examine genetic drift and mutations within diseased cells or to detect
CC the presence of CLCA1 RNA in a cell. This sequence represents an
CC enzymatic nucleic acid molecule of the invention
XX
SQ Sequence 17 BP; 2 A; 3 C; 3 G; 0 T; 9 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 327 CAAGCAGATGCAGAGAT 343
Db 17 CAACAGATACAGAGAT 1

RESULT 882
ABT37086/c
ID ABT37086 standard; DNA; 17 BP.
XX
XX ABT37086;
XX
XX 12-JUN-2003 (first entry)
XX
XX Tumour suppression related human fukutin oligo SEQ ID No 2723.
DE
XX
XX Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; protein chip; gene therapy; tumour suppression;
KW human fukutin; ds.
XX
XX Homo sapiens.
OS
XX
XX WO2003025175-A2.
PN
XX
XX 27-MAR-2003.
PD
XX
XX 17-SEP-2002; 2002WO-IB004208.
PF
XX
XX 17-SEP-2001; 2001FR-00011978.
PR
XX
XX (MOLE-) MOLECULAR ENGINES LAB.
PA

PI Telerman A, Amson R, Tuijnder M;
XX WPI; 2003-313353/30.
XX New isolated nucleic acid, useful for treating viral diseases associated
PT with tumors and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.
XX
XX Disclosure; Page 351; 720pp; French.
PS
XX
XX The invention relates to a novel isolated 17 mer nucleic acid sequence,
CC given in the specification, a sequence containing at least 15 consecutive
CC nucleotides from the 17 mer sequence, a sequence with, after optimal
CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
CC hybridizes to them under highly stringent conditions, or the complement
CC of any of them, or the corresponding RNA. The novel isolated nucleic
CC acids of the invention are useful as probes and primers for detecting,
CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
CC component of a gene chip, in vitro as (anti)sense reagents, and for
CC production of recombinant polypeptides. Any of the nucleic acids,
CC polypeptides, vectors containing the nucleic acids, cells containing the
CC vector or antibodies directed against the polypeptides are useful for
CC preparation of pharmaceuticals for prevention and/or treatment of viral
CC diseases that are characterised by development of tumours or cell
CC degeneration, specifically cancer but also Alzheimer's disease and
CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC patient samples is useful for diagnosis and/or prognosis of these
CC diseases. The polypeptides can also be used to generate antibodies, and
CC both the polypeptide and antibodies are useful as components of protein
CC chips. The nucleic acid sequences of the invention can be used in gene
CC therapy. This polynucleotide sequence represents a tumour suppression
CC related human fukutin oligonucleotide of the invention
XX
SQ Sequence 17 BP; 5 A; 4 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1947 ACTGGCCTCAAGTGAGC 1963
Db 17 ACTGGCTTCAAGTGATC 1

RESULT 883
ADB03774/c
ID ADB03774 standard; DNA; 17 BP.
XX
XX ADB03774;
XX
XX 20-NOV-2003 (first entry)
DT
XX
XX Human MD27 scanning oligonucleotide SEQ ID 4760.
DE
XX
XX Cytostatic; immunostimulant; gene therapy; vaccine; human;
KW zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
KW developmental disorder; ss.
XX
XX Homo sapiens.
OS
XX
XX EP1281758-A2.
PN
XX
XX 05-FEB-2003.
PD
XX
XX 30-JUL-2002; 2002EP-00016874.
PF
XX
XX 02-AUG-2001; 2001US-00922181.
PR
XX
XX (AEOM-) AEOMICA INC.
PA
XX
XX Shannon M, Gu Y, Nguyen C;
PI
XX

DR WPI; 2003-423107/40.

XX New zinc finger-containing proteins and nucleic acids, useful in

PT manufacturing a medicament for treating or preventing a disorder

PT associated with decreased or increased expression or activity of MDZ3,

PT MDZ4, MDZ7 or MDZ12, e.g. cancer.

XX

PS Example 8; SEQ ID NO 4760; 103pp; English.

XX

CC The present invention relates to novel human zinc finger-containing

CC proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is

CC encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,

CC MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome

CC 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,

CC or in manufacturing a medicament for treating or preventing a disorder,

CC associated with decreased or increased expression or activity of MDZ3,

CC MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic

CC acids and proteins are also useful for diagnosing or monitoring a disease

CC caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic

CC acids can also be used as probes to detect and characterize gross

CC alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are

CC useful in constructing microarrays for measuring gene expression. The

CC proteins are useful as therapeutic agents for gene therapy or as

CC vaccines. The present sequence was used to illustrate the invention.

XX

SQ Sequence 17 BP; 0 A; 8 C; 1 G; 8 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 17;

Best Local Similarity 88.2%; Pred. No. 8e+02; 2; Indels 0; Gaps 0;

Matches 15; Conservative 0; Mismatches 2;

QY 1424 AGGAGAAGAAAGGATC 1440

DB | | | | | | | | | | | | | | | |

17 AGGAGAAGAAAGGAGGC 1

RESULT 884

ABZ65102

ID ABZ65102 standard; RNA; 17 BP.

XX

AC ABZ65102;

DT 21-MAR-2003 (first entry)

XX

DE Human HER2 DNazyme substrate #559.

XX

KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;

KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;

KW anti-rheumatic; cancer; AIDS; ss.

XX

OS Homo sapiens.

XX

PN WO200297114-A2.

PD 05-DEC-2002.

XX

PF 29-MAY-2002; 2002WO-US016840.

XX

PR 29-MAY-2001; 2001US-0294140P.

PR 06-JUN-2001; 2001US-0296249P.

PR 10-SEP-2001; 2001US-0318471P.

XX

PA (RIBO-) RIBOZYME PHARM INC.

XX

PI Mcswiggen J;

XX

DR WPI; 2003-140484/13.

XX

PT Novel short interfering RNA and enzymatic nucleic acid useful for

PT treating cancer, modulates the expression of a nucleic acid encoding

PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.

XX

PS Claim 4; Page 143; 185pp; English.

XX

CC The invention relates to a novel short interfering RNA (siRNA) nucleic

CC acid molecule or an enzymatic nucleic acid molecule, that modulates

CC expression of a nucleic acid molecule encoding HER2, K-Ras, N-Ras,

CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic

CC acid molecule of the invention has cytostatic, anti-HIV, and anti-

CC rheumatic activity. The nucleic acid molecules are useful for reducing

CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are

CC also useful for treating breast, ovarian, colorectal, lung, prostate,

CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences

CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,

CC ribozymes of the invention

XX

SQ Sequence 17 BP; 5 A; 4 C; 5 G; 0 T; 3 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 17;

Best Local Similarity 70.6%; Pred. No. 8e+02; 3; Indels 0; Gaps 0;

Matches 12; Conservative 3; Mismatches 2;

QY 1268 ACAAGCGCATCTCGATC 1284

DB | | | | | | | | | | | | | | |

1 ACAAGGCGCAUCUGGATC 17

RESULT 885

ABZ61604

ID ABZ61604 standard; RNA; 17 BP.

XX

AC ABZ61604;

DT 21-MAR-2003 (first entry)

XX

DE Human H-Ras DNazyme target #395.

XX

KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;

KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;

KW anti-rheumatic; cancer; AIDS; ss.

XX

OS Homo sapiens.

XX

PN WO200297114-A2.

PD 05-DEC-2002.

XX

PF 29-MAY-2002; 2002WO-US016840.

XX

PR 29-MAY-2001; 2001US-0294140P.

PR 06-JUN-2001; 2001US-0296249P.

PR 10-SEP-2001; 2001US-0318471P.

XX

PA (RIBO-) RIBOZYME PHARM INC.

XX

PI Mcswiggen J;

XX

DR WPI; 2003-140484/13.

XX

PT Novel short interfering RNA and enzymatic nucleic acid useful for

PT treating cancer, modulates the expression of a nucleic acid encoding

PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.

XX

PS Claim 58; Page 118; 185pp; English.

XX

CC The invention relates to a novel short interfering RNA (siRNA) nucleic

CC acid molecule or an enzymatic nucleic acid molecule, that modulates

CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,

CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic

CC acid molecule of the invention has cytostatic, anti-HIV, and anti-

CC rheumatic activity. The nucleic acid molecules are useful for reducing

CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are

CC also useful for treating breast, ovarian, colorectal, lung, prostate,

CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences

CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,

```
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC Ribozymes of the invention
XX
SQ Sequence 17 BP; 5 A; 5 C; 5 G; 0 T; 2 U; 0 Other;
  Query Match      0.7%; Score 13.8; DB 1; Length 17;
  Best Local Similarity 88.2%; Pred. No. 8e+02;
  Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1249 GAGGACGAGACGACCC 1265
Db 1 GUGGACGAGUACGACCC 17

RESULT 886
ABZ61267/c
ID ABZ61267 standard; RNA; 17 BP.
XX
AC ABZ61267;
XX
DT 21-MAR-2003 (first entry)
XX
DE Human H-Ras DNazyme target #58.
XX
KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosstatic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX
OS Homo sapiens.
XX
PN WO200297114-A2.
XX
PD 05-DEC-2002.
XX
PF 29-MAY-2002; 2002WO-US016840.
XX
PR 29-MAY-2001; 2001US-0294140P.
PR 06-JUN-2001; 2001US-0296249P.
PR 10-SEP-2001; 2001US-0318471P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J;
XX
DR WPI; 2003-140484/13.
XX
PF Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
PS Claim 58; Page 112; 185pp; English.
XX
CC The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC rheumatic activity. The nucleic acid molecules are useful for reducing
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC ribozymes of the invention
XX
SQ Sequence 17 BP; 1 A; 10 C; 5 G; 0 T; 1 U; 0 Other;
  Query Match      0.7%; Score 13.8; DB 1; Length 17;
  Best Local Similarity 88.2%; Pred. No. 8e+02;
  Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 7 AGCCGCGGCGGAGGG 23
  ||||| ||||| ||||| ||||| |||||
```

```
Db 17 AGCCGCGGTTCGGGCGGG 1

RESULT 887
ABZ61695
ID ABZ61695 standard; RNA; 17 BP.
XX
AC ABZ61695;
XX
DT 21-MAR-2003 (first entry)
XX
DE Human H-Ras DNazyme target #486.
XX
KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytosstatic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX
OS Homo sapiens.
XX
PN WO200297114-A2.
XX
PD 05-DEC-2002.
XX
PF 29-MAY-2002; 2002WO-US016840.
XX
PR 29-MAY-2001; 2001US-0294140P.
PR 06-JUN-2001; 2001US-0296249P.
PR 10-SEP-2001; 2001US-0318471P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J;
XX
DR WPI; 2003-140484/13.
XX
PF Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
PS Claim 58; Page 120; 185pp; English.
XX
CC The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC rheumatic activity. The nucleic acid molecules are useful for reducing
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC ribozymes of the invention
XX
SQ Sequence 17 BP; 3 A; 4 C; 5 G; 0 T; 5 U; 0 Other;
  Query Match      0.7%; Score 13.8; DB 1; Length 17;
  Best Local Similarity 64.7%; Pred. No. 8e+02;
  Matches 11; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

QY 611 TGGAGAGGCGCTTCTAC 627
  :||| ||||| ||||| ||||| |||||
Db 1 UGGAGGAGGCGGCUUAC 17

RESULT 888
ACD62482
ID ACD62482 standard; RNA; 17 BP.
XX
AC ACD62482;
XX
DT 23-SEP-2003 (first entry)
XX
```


DE HCV minus strand DNazyme substrate sequence #569.

XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;

XX RNA stability; RNA expression; RNA synthesis; antisense;

KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;

KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;

KW HBV reverse transcriptase; Enhancer I region; viral replication;

KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;

KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;

KW virucide; antiinflammatory; substrate; ss.

XX Hepatitis C virus.

OS

XX WO200281494-A1.

XX 17-OCT-2002.

XX 26-MAR-2002; 2002WO-US009187.

XX 26-MAR-2001; 2001US-00817879.

PR 08-JUN-2001; 2001US-00877478.

PR 08-JUN-2001; 2001US-0296876P.

PR 24-OCT-2001; 2001US-0335059P.

PR 05-DEC-2001; 2001US-0337055P.

XX (RIBO-) RIBOZYME PHARM INC.

PA (BLAT/) BLATT L.

PA (MACE/) MACEJAK D.

PA (MCSW/) MCSWIGGEN J.

PA (MORR/) MORRISSEY D.

PA (PAVC/) PAVCO P.

PA (LEEP/) LEE P.

PA (DRAP/) DRAPER K.

PA (ROBE/) ROBERTS E.

XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;

PI Draper K, Roberts E;

XX WPI; 2003-229207/22.

DR Novel compound useful for treating cirrhosis, liver failure,

PT hepatocellular carcinoma, or condition associated with hepatitis C virus

PT infection.

XX Claim 1; Page 285; 387pp; English.

PS The present invention relates to nucleic acid molecules which modulate

CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or

CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense

CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,

CC inozymes, zinzymes, amberyne, and G-cleaver ribozymes. Also disclosed

CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse

CC transcriptase and/or HBV reverse transcriptase primer sequences, as well

CC as oligonucleotides that specifically bind the Enhancer I region of HBV

CC DNA. The nucleic acids may be used to modulate the expression of HBV

CC genes and HBV viral replication. Also disclosed is a method for screening

CC compounds and/or potential therapies directed against HBV, and compounds

CC that modulate the expression and/or replication of HCV. The compounds and

CC methods of the invention are useful for the treatment of degenerative and

CC disease states related to HBV and HCV infection, replication and gene

CC expression such as cirrhosis, liver failure, and hepatocellular

CC carcinoma. The present sequence represents a substrate for one of the HCV

CC DNazyme or minus strand DNazyme sequences disclosed in the present

CC invention

XX Sequence 17 BP; 4 A; 4 C; 7 G; 0 T; 2 U; 0 Other;

SQ

Query Match 0.7%; Score 13.8; DB 1; Length 17;

Best Local Similarity 76.5%; Pred. No. Re+02;

Matches 13; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

QY 244 GCTGAGGAGTACCA 260

||||| : |||||

Db 1 GCUGAGGAGCUGGCCAA 17

RESULT 889

ACD60187/c

ID ACD60187 standard; RNA, 17 BP.

XX ACD60187;

AC ACD60187;

XX 24-SEP-2003 (first entry)

DT HCV DNazyme substrate sequence #1709.

XX Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;

XX RNA stability; RNA expression; RNA synthesis; antisense;

KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; zinzyme;

KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;

KW HBV reverse transcriptase; Enhancer I region; viral replication;

KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;

KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;

KW virucide; antiinflammatory; substrate; ss.

XX Hepatitis C virus.

OS

XX WO200281494-A1.

XX 17-OCT-2002.

XX 26-MAR-2002; 2002WO-US009187.

XX 26-MAR-2001; 2001US-00817879.

PR 08-JUN-2001; 2001US-00877478.

PR 08-JUN-2001; 2001US-0296876P.

PR 24-OCT-2001; 2001US-0335059P.

PR 05-DEC-2001; 2001US-0337055P.

XX (RIBO-) RIBOZYME PHARM INC.

PA (BLAT/) BLATT L.

PA (MACE/) MACEJAK D.

PA (MCSW/) MCSWIGGEN J.

PA (MORR/) MORRISSEY D.

PA (PAVC/) PAVCO P.

PA (LEEP/) LEE P.

PA (DRAP/) DRAPER K.

PA (ROBE/) ROBERTS E.

XX Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;

PI Draper K, Roberts E;

XX WPI; 2003-229207/22.

DR Novel compound useful for treating cirrhosis, liver failure,

PT hepatocellular carcinoma, or condition associated with hepatitis C virus

PT infection.

XX Claim 1; Page 264; 387pp; English.

PS The present invention relates to nucleic acid molecules which modulate

CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or

CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense

CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,

CC inozymes, zinzymes, amberyne, and G-cleaver ribozymes. Also disclosed

CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse

CC transcriptase and/or HBV reverse transcriptase primer sequences, as well

CC as oligonucleotides that specifically bind the Enhancer I region of HBV

CC DNA. The nucleic acids may be used to modulate the expression of HBV

CC genes and HBV viral replication. Also disclosed is a method for screening

CC compounds and/or potential therapies directed against HBV, and compounds

CC that modulate the expression and/or replication of HCV. The compounds and

CC methods of the invention are useful for the treatment of degenerative and

CC disease states related to HBV and HCV infection, replication and gene

CC expression such as cirrhosis, liver failure, and hepatocellular

CC carcinoma. The present sequence represents a substrate for one of the HCV

CC DNzyme or minus strand DNzyme sequences disclosed in the present
 CC invention
 XX
 SQ Sequence 17 BP; 2 A; 7 C; 4 G; 0 T; 4 U; 0 Other;
 Query Match 0.7%; Score 13.8; DB 1; Length 17;
 Best Local Similarity 88.2%; Pred. No. 8e+02; Mismatches 0; Gaps 0;
 Matches 15; Conservative 0; Indels 2; Indels 0; Gaps 0;
 QY 245 CTGAGGAGATGACCAAG 261
 Db 17 CTGAGGAGCTGGCCAAG 1
 RESULT 890
 ACD65057
 ID ACD65057 standard; RNA; 17 BP.
 XX
 AC ACD65057;
 XX
 DT 30-SEP-2003 (first entry)
 XX
 DE HCV minus strand DNzyme substrate sequence #1856.
 XX
 KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
 KW RNA stability; RNA expression; RNA synthesis; antisense;
 KW enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;
 KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;
 KW HBV reverse transcriptase; Enhancer I region; viral replication;
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
 KW virucide; antiinflammatory; substrate; ss.
 XX
 OS Hepatitis C virus.
 XX
 PN WO200281494-A1.
 XX
 PD 17-OCT-2002.
 XX
 PF 26-MAR-2002; 2002WO-US009187.
 XX
 PR 26-MAR-2001; 2001US-00817879.
 XX
 PR 08-JUN-2001; 2001US-00877478.
 XX
 PR 08-JUN-2001; 2001US-0296876P.
 XX
 PR 24-OCT-2001; 2001US-0335059P.
 XX
 PR 05-DEC-2001; 2001US-0337055P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 XX
 PA (BLAT/) BLATT L.
 XX
 PA (MACE/) MACEJAK D.
 XX
 PA (MCSW/) MCSWIGGEN J.
 XX
 PA (MORR/) MORRISSEY D.
 XX
 PA (PAVC/) PAVCO P.
 XX
 PA (LEPP/) LEE P.
 XX
 PA (DRAP/) DRAPER K.
 XX
 PA (ROBE/) ROBERTS E.
 XX
 PI Blatt L, Macejak D, Mcswiggen J, Morrissey J, Pavco P, Lee P;
 PI Draper K, Roberts E;
 XX
 DR WPI; 2003-229207/22.
 XX
 PT Novel compound useful for treating cirrhosis, liver failure,
 PT hepatocellular carcinoma, or condition associated with hepatitis C virus
 PT infection.
 XX
 PS Claim 1; Page 308; 387pp; English.
 XX
 CC The present invention relates to nucleic acid molecules which modulate
 CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
 CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
 CC and enzymatic nucleic acids such as hammerhead ribozymes, DNzymes,
 CC inozymes, zinzymes, amberyne, and G-cleaver ribozymes. Also disclosed

CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
 CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
 CC as oligonucleotides that specifically bind the Enhancer I region of HBV
 CC DNA. The nucleic acids may be used to modulate the expression of HBV
 CC genes and HBV viral replication. Also disclosed is a method for screening
 CC compounds and/or potential therapies directed against HBV, and compounds
 CC that modulate the expression and/or replication of HCV. The compounds and
 CC methods of the invention are useful for the treatment of degenerative and
 CC disease states related to HBV and HCV infection, replication and gene
 CC expression such as cirrhosis, liver failure, and hepatocellular
 CC carcinoma. The present sequence represents a substrate for one of the HCV
 CC DNzyme or minus strand DNzyme sequences disclosed in the present
 CC invention
 XX
 SQ Sequence 17 BP; 4 A; 8 C; 4 G; 0 T; 1 U; 0 Other;
 Query Match 0.7%; Score 13.8; DB 1; Length 17;
 Best Local Similarity 82.4%; Pred. No. 8e+02; Mismatches 1; Indels 0; Gaps 0;
 Matches 14; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
 QY 1220 AGGACGCCATCCTCTGAG 1236
 Db 1 AGGACCCACCCUGAG 17
 RESULT 891
 ACD62411/C
 ID ACD62411 standard; RNA; 17 BP.
 XX
 AC ACD62411;
 XX
 DT 23-SEP-2003 (first entry)
 XX
 DE HCV minus strand DNzyme substrate sequence #554.
 XX
 KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
 KW RNA stability; RNA expression; RNA synthesis; antisense;
 KW enzymatic nucleic acid; hammerhead ribozyme; DNzyme; inozyme; zinzyme;
 KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;
 KW HBV reverse transcriptase; Enhancer I region; viral replication;
 KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
 KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
 KW virucide; antiinflammatory; substrate; ss.
 XX
 OS Hepatitis C virus.
 XX
 PN WO200281494-A1.
 XX
 PD 17-OCT-2002.
 XX
 PF 26-MAR-2002; 2002WO-US009187.
 XX
 PR 26-MAR-2001; 2001US-00817879.
 XX
 PR 08-JUN-2001; 2001US-00877478.
 XX
 PR 08-JUN-2001; 2001US-0296876P.
 XX
 PR 24-OCT-2001; 2001US-0335059P.
 XX
 PR 05-DEC-2001; 2001US-0337055P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 XX
 PA (BLAT/) BLATT L.
 XX
 PA (MACE/) MACEJAK D.
 XX
 PA (MCSW/) MCSWIGGEN J.
 XX
 PA (MORR/) MORRISSEY D.
 XX
 PA (PAVC/) PAVCO P.
 XX
 PA (LEPP/) LEE P.
 XX
 PA (DRAP/) DRAPER K.
 XX
 PA (ROBE/) ROBERTS E.
 XX
 PI Blatt L, Macejak D, Mcswiggen J, Morrissey J, Pavco P, Lee P;
 PI Draper K, Roberts E;
 XX
 DR WPI; 2003-229207/22.
 XX

PT Novel compound useful for treating cirrhosis, liver failure,
PT hepatocellular carcinoma, or condition associated with hepatitis C virus
XX infection.
PS Claim 1; Page 284; 387pp; English.
XX
CC The present invention relates to nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and HBV viral replication. Also disclosed is a method for screening
CC compounds and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HCV
CC DNazyme or minus strand DNazyme sequences disclosed in the present
CC invention
XX
SQ Sequence 17 BP; 3 A; 2 C; 6 G; 0 T; 6 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 8e+02; Mismatches 0; Gaps 0;
Matches 15; Conservative 0; Indels 2; Indels 0; Gaps 0;
QY 1107 CAATATGACTTAACCCAGA 1123
DB 17 CAATATGACTTCCCCAGA 1
|||||
RESULT 892
ACD51143/C
ID ACD51143 standard; RNA; 17 BP.
XX
AC ACD51143;
XX
DT 23-SEP-2003 (first entry)
XX
DE HBV hammerhead ribozyme substrate sequence #405.
XX
KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW RNA stability; RNA expression; RNA synthesis; antisense;
KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;
KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;
KW HBV reverse transcriptase; Enhancer I region; viral replication;
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW virucide; antiinflammatory; substrate; ss.
XX
OS Hepatitis B virus.
XX
PN WO200281494-A1.
XX
PD 17-OCT-2002.
XX
PF 26-MAR-2002; 2002WO-US009187.
XX
PR 26-MAR-2001; 2001US-00817879.
PR 08-JUN-2001; 2001US-00877478.
PR 08-JUN-2001; 2001US-02968769.
PR 24-OCT-2001; 2001US-0335059P.
PR 05-DEC-2001; 2001US-0337055P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
PA (BLAT/) BLATT L.
PA (MACE/) MACEJAK D.
PA (MCSW/) MCSWIGGEN J.

(MORR/) MORRISSEY D.
(PAVC/) PAVCO P.
(LEEP/) LEE P.
(DRAP/) DRAPER K.
(PA (ROBE/) ROBERTS E.
XX
PI Blatt L, Macejak D, Mcswiggen J, Morrissey D, Pavco P, Lee P;
XX Draper K, Roberts E;
DR WPI; 2003-229207/22.
XX
PT Novel compound useful for treating cirrhosis, liver failure,
PT hepatocellular carcinoma, or condition associated with hepatitis C virus
XX infection.
XX
PS Example 1; Page 144; 387pp; English.
XX
CC The present invention relates to nucleic acid molecules which modulate
CC the synthesis, expression and/or stability of Hepatitis C virus (HCV) or
CC Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense
CC and enzymatic nucleic acids such as hammerhead ribozymes, DNazymes,
CC inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed
CC are nucleic acid decoy molecules and aptamers that bind to HBV reverse
CC transcriptase and/or HBV reverse transcriptase primer sequences, as well
CC as oligonucleotides that specifically bind the Enhancer I region of HBV
CC DNA. The nucleic acids may be used to modulate the expression of HBV
CC genes and HBV viral replication. Also disclosed is a method for screening
CC compounds and/or potential therapies directed against HBV, and compounds
CC that modulate the expression and/or replication of HCV. The compounds and
CC methods of the invention are useful for the treatment of degenerative and
CC disease states related to HBV and HCV infection, replication and gene
CC expression such as cirrhosis, liver failure, and hepatocellular
CC carcinoma. The present sequence represents a substrate for one of the HBV
CC ribozyme, inozyme, G-cleaver, zinzyme, DNazyme or amberyne sequences
CC disclosed in the present invention
XX
SQ Sequence 17 BP; 1 A; 5 C; 2 G; 0 T; 9 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 8e+02; Mismatches 0; Gaps 0;
Matches 15; Conservative 0; Indels 2; Indels 0; Gaps 0;
QY 1466 AGAAGCCAGAGCCCAA 1482
DB 17 AGAAGTCAGAGGCCAA 1
|||||
RESULT 893
ACD60202
ID ACD60202 standard; RNA; 17 BP.
XX
AC ACD60202;
XX
DT 24-SEP-2003 (first entry)
XX
DE HCV DNazyme substrate sequence #1724.
XX
KW Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
KW RNA stability; RNA expression; RNA synthesis; antisense;
KW enzymatic nucleic acid; hammerhead ribozyme; DNazyme; inozyme; zinzyme;
KW amberyne; G-cleaver ribozyme; decoy molecule; aptamer;
KW HBV reverse transcriptase; Enhancer I region; viral replication;
KW degenerative; disease state; HBV infection; HCV infection; cirrhosis;
KW liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
KW virucide; antiinflammatory; substrate; ss.
XX
OS Hepatitis C virus.
XX
PN WO200281494-A1.
XX
PD 17-OCT-2002.
XX
PF 26-MAR-2002; 2002WO-US009187.

DR WPI; 2003-333167/31.

XX New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.

XX Disclosure; Page 695; 738pp; French.

XX The present invention relates to murine oligonucleotides (ACC62754-ACC6806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of a gene chip; in vitro as (anti)sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, CC specifically cancer but also Alzheimer's disease and schizophrenia

XX Sequence 17 BP; 4 A; 4 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 8e+02; Mismatches 2; Indels 0; Gaps 0;
Matches 15; Conservative 0;

QY 1281 GATCTGCTCTGACA 1297
|||||||

Db 1 GATCTGCTCTGACA 17

RESULT 896
ADB42595/c
ID ADB42595 standard; DNA; 17 BP.

XX ADB42595;

XX 18-DEC-2003 (revised)

DT 04-DEC-2003 (first entry)

XX Tumour suppression/reversion associated nucleotide #2918.

XX cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
KW primer; probe; tumour suppression; tumour reversion; apoptosis;
KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
KW diagnosis.

XX Homo sapiens.

OS WO2003040369-A2.

PN 15-MAY-2003.

XX 17-SEP-2002; 2002WO-IB004219.

PF 17-SEP-2001; 2001PR-00011981.

XX (MOLE-) MOLECULAR ENGINES LAB.

PA Telerman A, Amson R, Tuijnder M;
XX WPI; 2003-441574/41.

XX New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.

XX Disclosure; Page 373; 771pp; French.

XX The invention relates to the isolation of 6327 nucleotide sequences, CC fragments of at least 15 consecutive nucleotides of these nucleotides, CC sequence having at least 80% identity, after optimal alignment, with the CC nucleotides, a sequence that hybridizes under stringent conditions with CC the nucleotides, or the complement, or corresponding RNA, of the CC nucleotides. The nucleotides are used as probes or primers for detecting, CC identifying, quantifying and/or amplifying nucleic acids, as in vitro CC sense and antisense sequences, of nucleotides involved in tumour

CC nucleotides. The nucleotides are used as probes or primers for detecting, CC identifying, quantifying and/or amplifying nucleic acids, as in vitro CC sense and antisense sequences, of nucleotides involved in tumour CC suppression or reversion, apoptosis and or viral resistance, to produce CC recombinant polypeptides, and to prepare transgenic animals, as CC cells containing the vectors), the encoded polypeptides containing them and CC (Ab) against the polypeptide are useful for prevention and/or treatment CC of viral infections or diseases characterized by development of tumours CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).

CC Analysis of the expression of the nucleotides can be used for diagnosis CC and/or prognosis of these diseases. The nucleotides and polypeptides can CC also be used to screen for their specific interactive molecules, CC potentially useful for treating diseases associated with abnormal CC expression of the nucleotides.

XX Sequence 17 BP; 3 A; 4 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 8e+02; Mismatches 2; Indels 0; Gaps 0;
Matches 15; Conservative 0;

QY 670 GAGTACTTCCAGGAAAC 686
|||||||

Db 17 GAGAACTTCCAGGATC 1

RESULT 897
ADB42646/c
ID ADB42646 standard; DNA; 17 BP.

XX ADB42646;

XX 18-DEC-2003 (revised)

DT 04-DEC-2003 (first entry)

XX Tumour suppression/reversion associated nucleotide #2969.

XX cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
KW primer; probe; tumour suppression; tumour reversion; apoptosis;
KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
KW diagnosis.

XX Homo sapiens.

OS WO2003040369-A2.

PN 15-MAY-2003.

XX 17-SEP-2002; 2002WO-IB004219.

PF 17-SEP-2001; 2001PR-00011981.

XX (MOLE-) MOLECULAR ENGINES LAB.

PA Telerman A, Amson R, Tuijnder M;
XX WPI; 2003-441574/41.

XX New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.

XX Disclosure; Page 379; 771pp; French.

XX The invention relates to the isolation of 6327 nucleotide sequences, CC fragments of at least 15 consecutive nucleotides of these nucleotides, CC sequence having at least 80% identity, after optimal alignment, with the CC nucleotides, a sequence that hybridizes under stringent conditions with CC the nucleotides, or the complement, or corresponding RNA, of the CC nucleotides. The nucleotides are used as probes or primers for detecting, CC identifying, quantifying and/or amplifying nucleic acids, as in vitro CC sense and antisense sequences, of nucleotides involved in tumour

CC suppression or reversion, apoptosis and or viral resistance, to produce
 CC recombinant polypeptides, and to prepare transgenic animals, as
 CC experimental models. The nucleotides (also vectors containing them and
 CC cells containing the vectors), the encoded polypeptides and antibodies
 CC (Ab) against the polypeptide are useful for prevention and/or treatment
 CC of viral infections or diseases characterized by development of tumours
 CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
 CC Analysis of the expression of the nucleotides can be used for diagnosis
 CC of viral infections or diseases characterized by development of tumours
 CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
 CC Analysis of the expression of the nucleotides can be used for diagnosis
 CC and/or prognosis of these diseases. The nucleotides and polypeptides can
 CC also be used to screen for their specific interactive molecules,
 CC potentially useful for treating diseases associated with abnormal
 CC expression of the nucleotides.

XX Sequence 17 BP; 6 A; 5 C; 5 G; 1 T; 0 U; 0 Other;
 SQ Query Match 0.7%; Score 13.8; DB 1; Length 17;
 Best Local Similarity 88.2%; Pred. No. 8e+02; Indels 0; Gaps 0;
 Matches 15; Conservative 0; Mismatches 2;

QY 855 CTCCTATCTGGGGATC 871
 Db 17 CTCCTCTCTGGGGATC 1

RESULT 898
 ADB42266
 ID ADB42266 standard; DNA; 17 BP.
 XX AC ADB42266;
 XX AC ADB42266;
 DT 18-DEC-2003 (revised)
 DT 04-DEC-2003 (first entry)
 XX DE Tumour suppression/reversion associated nucleotide #2589.
 XX KW cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
 KW primer; probe; tumour suppression; tumour reversion; apoptosis;
 KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
 KW diagnosis.
 XX OS Homo sapiens.
 XX PN WO2003040369-A2.
 XX XX
 XX PD 15-MAY-2003.
 XX PF 17-SEP-2002; 2002WO-IB004219.
 XX PR 17-SEP-2001; 2001FR-00011981.
 XX PA (MOLE-) MOLECULAR ENGINES LAB.
 XX XX
 XX PI Tellerman A, Amson R, Tuijnder M;
 XX WPI; 2003-441574/41.
 XX PT New nucleic acid encoding human prostate membrane-specific antigen,
 XX useful e.g. for treatment of tumors and viral infection, also related
 XX polypeptide and antibodies.
 XX PS Disclosure; Page 334; 771pp; French.
 XX CC The invention relates to the isolation of 6327 nucleotide sequences,
 CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
 CC sequence having at least 80% identity, after optimal alignment, with the
 CC nucleotides, a sequence that hybridizes under stringent conditions with
 CC the nucleotides, or the complement, or corresponding RNA, of the
 CC nucleotides. The nucleotides are used as probes or primers for detecting,
 CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
 CC sense and antisense sequences, of nucleotides involved in tumour
 CC suppression or reversion, apoptosis and or viral resistance, to produce
 CC recombinant polypeptides, and to prepare transgenic animals, as
 CC experimental models. The nucleotides (also vectors containing them and

CC cells containing the vectors), the encoded polypeptides and antibodies
 CC (Ab) against the polypeptide are useful for prevention and/or treatment
 CC of viral infections or diseases characterized by development of tumours
 CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
 CC Analysis of the expression of the nucleotides can be used for diagnosis
 CC of viral infections or diseases characterized by development of tumours
 CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
 CC Analysis of the expression of the nucleotides can be used for diagnosis
 CC and/or prognosis of these diseases. The nucleotides and polypeptides can
 CC also be used to screen for their specific interactive molecules,
 CC potentially useful for treating diseases associated with abnormal
 CC expression of the nucleotides.

XX Sequence 17 BP; 3 A; 2 C; 1 G; 11 T; 0 U; 0 Other;
 SQ Query Match 0.7%; Score 13.8; DB 1; Length 17;
 Best Local Similarity 88.2%; Pred. No. 8e+02; Indels 0; Gaps 0;
 Matches 15; Conservative 0; Mismatches 2;

QY 1573 GATTTTATATTTTCTAT 1589
 Db 1 GATCTTTTATTTCTAT 17

RESULT 899
 ADC04842/C
 ID ADC04842 standard; DNA; 17 BP.
 XX AC ADC04842;
 XX AC ADC04842;
 DT 18-DEC-2003 (first entry)
 XX DE Human Na/H exchanger-like protein 1 gene oligonucleotide #1289.
 XX KW ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;
 KW NHEPL1; passive replacement therapy; vaccine; diagnosis.
 XX OS Homo sapiens.
 XX PN EP1273660-A2.
 XX XX
 XX PD 08-JAN-2003.
 XX PF 25-JAN-2002; 2002EP-00001160.
 XX PR 30-JAN-2001; 2001WO-US0000666.
 XX PR 23-MAY-2001; 2001US-00864761.
 XX PR 21-DEC-2001; 2001US-0343331P.
 XX XX
 XX PA (AEOM-) AEOMICA INC.
 XX XX
 XX PI Gu Y;
 XX WPI; 2003-302724/30.
 XX DR New human sodium-hydrogen exchanger like protein 1 (NHEPL1), useful as a
 XX passive replacement therapy or as a vaccine for treating or preventing
 XX disorders associated with aberrant expression or activity of human
 XX NHEPL1.
 XX PS Example 2; SEQ ID NO 1329; 468pp; English.
 XX CC The invention relates to a nucleic acid molecule which encodes a Na⁺/H⁺
 CC exchanger like protein (NHEPL1). The NHEPL1 nucleic acid molecule, NHEPL1
 CC polypeptide, an antibody against the protein or its antigen-binding
 CC fragment is useful in therapy. The NHEPL1 nucleic acid molecule, NHEPL1
 CC polypeptide and an agonist are particularly useful for manufacturing a
 CC medicament for treating or preventing a disorder associated with
 CC decreased expression or activity of human NHEPL1. The antibody or its
 CC antigen-binding fragment, and an antagonist, are useful for manufacturing
 CC a medicament for treating or preventing a disorder associated with
 CC increased expression or activity of human NHEPL1. The NHEPL1 nucleic acid
 CC or protein is useful as passive replacement therapy, as a vaccine, or in
 CC diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide
 CC spanning the sequence of the human NHEPL1 gene (ADC03514).
 XX

```

SQ Sequence 17 BP; 0 A; 11 C; 0 G; 6 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1334 AAGAGGAGGAGAGGGG 1350
Db 17 AGGAGGAAGGAGAGGGG 1

RESULT 900
ADE30707
ID ADE30707 standard; DNA; 17 BP.
XX AC ADE30707;
XX DT
XX DT
XX DT
XX 29-JAN-2004 (first entry)
XX Cholesterol homeostasis/adipogenesis related DNA seq id 94.
XX expression vector; anorectic; antiarteriosclerotic; cardiant;
XX antidiabetic; elevated cholesterol; elevated lipid; adipogenesis;
XX obesity; atherosclerosis; diabetes mellitus;
XX coronary artery heart disease; cholesterol homeostasis; ss;
XX differential expression.
XX Homo sapiens.
XX US2003180764-A1.
XX 25-SEP-2003.
XX 08-JAN-2003; 2003US-00339793.
XX 09-JAN-2002; 2002US-0347286P.
XX (LYNX-) LYNX THERAPEUTICS INC.
XX Shang J, Bowen B;
XX WPI; 2003-830986/77.
XX Polynucleotides differentially regulated in response to cholesterol and
XX adipogenesis are useful to detect and treat associated conditions such as
XX obesity, atherosclerosis, diabetes mellitus and coronary artery heart
XX disease.
XX Claim 8; SEQ ID NO 94; 59pp; English.
XX The invention describes a composition comprising at least one expression
XX vector comprising a polynucleotide of the invention. The composition has
XX anorectic, antiarteriosclerotic, cardiant and antidiabetic properties.
XX The invention is used to detect and treat conditions associated with
XX elevated cholesterol and lipid or during adipogenesis, particularly
XX obesity, atherosclerosis, diabetes mellitus or coronary artery heart
XX disease. This sequence represents a polynucleotide differentially
XX expressed during cholesterol homeostasis and adipogenesis.
XX Sequence 17 BP; 4 A; 2 C; 1 G; 10 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 17;
Best Local Similarity 88.2%; Pred. No. 8e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2041 GATACATTTTCATTTT 2057
Db 1 GATCCTATTTTAATTTT 17

RESULT 901
AAQ35580
ID AAQ35580 standard; DNA; 18 BP.

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XX AC AAQ35580;
XX 25-MAR-2003 (revised)
XX 24-FEB-1993 (first entry)
XX I3L pomoter primer MPSYN311.
XX NYVAC; recombinant; Hepatitis B virus; HBV; M protein; spsAg; PCR;
XX small pre-S antigen; HBV L; large pre-S antigen; lpsAg; pre-S region;
XX S12/core; vaccinia; Copenhagen vaccine; virulence factors; amplify;
XX deletion loci; recipient loci; polymerase chain reaction; ss.
XX Synthetic.
XX WO9215672-A1.
XX 17-SEP-1992.
XX 09-MAR-1992; 92WO-US001906.
XX 07-MAR-1991; 91US-00666056.
XX 11-JUN-1991; 91US-00713967.
XX 06-MAR-1992; 92US-00847951.
XX (VIRO-) VIROGENETICS CORP.
XX Paoletti E, Perkus ME, Taylor J, Tartaglia J, Norton EK;
XX Riviere M, De Taisne C, Limbach KJ, Johnson GP, Pincus SE, Cox WI;
XX Francis J, Gettig RR;
XX WPI; 1992-331718/40.
XX Vaccine comprises recombinant, attenuated pox-virus - use for vaccinating
XX against viral infections such as rabies, hepatitis B, HIV, HSV, EBV, CMV,
XX mumps etc.
XX Disclosure; Page 63; 456pp; English.
XX The sequences given in AAQ35561-82 were used in the construction of NYVAC
XX recombinants expressing Hepatitis B virus genes. The genes HBV M protein
XX (small pre-S antigen, spsAg), HBV L (large pre-S antigen, lpsAg) and a
XX fusion protein composed of the entire pre-S region (S12/ core, S1 + S2),
XX were inserted individually into three different sites of NYVAC separated
XX by from each other by large regions of vaccinia DNA containing essential
XX genes. NYVAC is a Copenhagen vaccine strain of vaccinia virus which has
XX been modified by deletion of six non-essential regions of the genome
XX encoding known or potential virulence factors. The deletion loci were
XX engineered as recipient loci for the insertion of foreign genes. The
XX spacing of the three inserted sequences ensured that any recombination
XX that did occur would lead to disruption of the vaccinia genome and would
XX cause unviable vaccinia virus. See AAQ35501-864. (Updated on 25-MAR-2003
XX to correct PN field.)
XX Sequence 18 BP; 7 A; 1 C; 2 G; 8 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 8.7e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2067 CTTTGTAATAAATGGT 2083
Db 2 CTTTGTAATAAATGAT 18

RESULT 902
AAQ50403
ID AAQ50403 standard; DNA; 18 BP.
XX AC AAQ50403;
XX 11-APR-1994 (first entry)

```

DE Terminator used in a recombinant avipox virus genome.
 XX
 KW APV; proliferation; genome; infectious bursal disease; IBD; vaccine; ss.
 XX
 OS Synthetic.
 XX
 PN JP05244940-A.
 XX
 PD 24-SEP-1993.
 XX
 PF 04-MAR-1992; 92JP-00082800.
 XX
 PR 09-AUG-1991; 91JP-00224868.
 XX
 PA (JAPG) NIPPON ZEON KK.
 XX
 XX WPI; 1993-347471/44.
 XX
 XX Recombinant avipox virus used for vaccine for domestic animals - consists
 PT of genome region and CDNA to encode polypeptide having identical
 PT antigenicity for large segment.
 XX
 PS Disclosure; Page 11; 18pp; Japanese.
 XX
 CC The sequence is that of a synthetic terminator sequence used as part of a
 CC recombinant APV capable of expressing antigens in large amounts and
 CC containing the DNA sequences required for viral proliferation. The DNA
 CC also comprises cDNA encoding the polypeptide having identical
 CC antigenicity for RNA large subunit from infectious bursal disease. The
 CC recombinant DNA is useful for a live vaccine for domestic animals. See
 CC also AAQ50398-402
 XX
 SQ Sequence 18 BP; 8 A; 1 C; 1 G; 8 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.8; DB 1; Length 18;
 Best Local Similarity 88.2%; Pred. No. 8.7e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1600 ATTTATATATAAAATTTA 1616
 Db 1 ATTTTATATAAAATGTA 17
 RESULT 903
 AAQ50409
 ID AAQ50409 standard; DNA; 18 BP.
 XX
 AC AAQ50409;
 XX
 DT 31-MAR-1994 (first entry)
 XX
 DE Probe SP3 for detection of Mycorrhiza fungi.
 XX
 KW Tricholoma matsutake; Lyophyllum shimeji; 18S rRNA; hypha; plant; pine;
 KW ss.
 XX
 OS Synthetic.
 XX
 PN JP05252999-A.
 XX
 PD 05-OCT-1993.
 XX
 PF 12-JAN-1993; 93JP-00003169.
 XX
 PR 14-JAN-1992; 92JP-00004308.
 XX
 XX (PENL) PENTEL KK.
 PA (RIKA) RIKAGAKU KENKYUSHO.
 XX
 XX WPI; 1993-347597/44.
 DR
 XX DNA probe for detection of Mycorrhiza fungi - contg. complementary
 PT sequence binding specifically to Mycorrhiza fungus.

XX Disclosure; Page 6; 8pp; Japanese.
 XX
 CC The sequence SP3 is an example of a probe contg. DNA complementary to
 CC nucleic acid of Mycorrhiza fungi. The probe specifically binds to a
 CC segment of the 18S rRNA of the RNA-encoding DNA of Mycorrhiza fungi. Such
 CC a probe is useful for the detection of Mycorrhiza fungi, esp. that of
 CC Tricholoma matsutake or Lyophyllum shimeji, and for detection of rooting
 CC or growth of hypha of Mycorrhiza to a host plant, e.g. pine. See also
 CC AAQ50404-14
 XX
 SQ Sequence 18 BP; 5 A; 6 C; 5 G; 2 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.8; DB 1; Length 18;
 Best Local Similarity 88.2%; Pred. No. 8.7e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 674 ACTTCCAGCACTGGG 690
 Db 2 ACTTCCAGCACTGGG 18
 RESULT 904
 AAQ43382
 ID AAQ43382 standard; DNA; 18 BP.
 XX
 AC AAQ43382;
 XX
 DT 17-DEC-2001 (revised)
 DT 27-OCT-1993 (first entry)
 XX
 DE Type A botulin toxin primer BotA1.
 XX
 KW PCR; polymerase chain reaction; Clostridium botulinum; BotA.
 XX
 OS Synthetic.
 XX
 PN USN7818600-N.
 XX
 PD 01-JUN-1993.
 XX
 PF 08-JAN-1992; 92US-00818600.
 XX
 PR 08-JAN-1992; 92US-00818600.
 XX
 PA (USNA) US DEPT OF THE NAVY.
 XX
 PI Ligler FS, Campbell JR;
 XX
 XX WPI; 1993-205698/25.
 DR
 XX Indirect detection of biological toxins from nucleic acid - e.g.
 PT biological warfare agents or botulin in food, by amplification by
 PT polymerase chain reaction.
 XX
 PS Example 2; Page 24; 30pp; English.
 XX
 CC A crude type A Clostridium botulinum (BotA) toxin prod. was subjected to
 CC 30 PCR cycles (after phenol extn. and DNA pptn.) using the BotA1 and
 CC BotA3 primers (AAQ43382-83). The amplification reaction mixt. was
 CC subjected to agarose gel electrophoresis, stained with ethidium bromide
 CC and exposed under UV light. A single stained band of the expected size
 CC (585 bp) was detected. (Note: Revised entry submitted to correct the
 CC patent number format of US Government-owned NTIS applications to prevent
 CC clashes with ongoing US granted patent numbers. For further information
 CC please visit the Derwent web site at
 CC www.derwent.com/dwpi/updates/ntis_us.html.)
 XX
 SQ Sequence 18 BP; 8 A; 2 C; 1 G; 7 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.8; DB 1; Length 18;
 Best Local Similarity 88.2%; Pred. No. 8.7e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;


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QY      1616 ATTAATAATAAATATCC 1632
DB      1 ATTAATTATAGATCC 17

RESULT 905
AAQ86233
ID      AAQ86233 standard; DNA; 18 BP.
XX
XX      AC      AAQ86233;
XX
XX      DT      11-JAN-1996 (first entry)
XX
XX      DE      DNA used in construction of recombinant poxvirus promoter.
XX
XX      KW      promoter; pox virus; combined promoter; recombinant; vaccine; poultry;
XX      live; db.
XX      OS      Synthetic.
XX      PN      JP07067655-A.
XX
XX      PD      14-MAR-1995.
XX
XX      PF      30-AUG-1993; 93JP-00238953.
XX
XX      PR      30-AUG-1993; 93JP-00238953.
XX
XX      PA      (JAFG ) NIPPON ZEON KK.
XX      PA      (SHIO ) SHIONOGI & CO LTD.
XX
XX      DR      WPI; 1995-143849/19.
XX
XX      PT      Combined pox-virus promoters contain at least four promoter fragments -
XX      and pox-virus containing the combined promoters and a foreign gene.
XX
XX      PS      Example 1; Fig 3; 12pp; Japanese.
XX
XX      CC      The DNA shown is a DNA fragment contg. a MluI site used in the
XX      construction of a combined promoter for recombinant poxvirus. Combined
XX      promoters for poxvirus comprise at least four DNA fragments having a
XX      promoter activity, pref. these fragments have early and late activity,
XX      and the promoter has at least one, pref. more than two promoters. The
XX      combined promoter has a strong activity and hence is useful in an
XX      effective vaccine, esp. against poxvirus in poultry
XX
XX      SQ      Sequence 18 BP; 8 A; 1 C; 1 G; 8 T; 0 U; 0 Other;
          Query Match      0.7%; Score 13.8; DB 1; Length 18;
          Best Local Similarity 88.2%; Pred. No. 8.7e+02;
          Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      1600 ATTTATATAAAATTTA 1616
DB      1 ATTTTATAAAATGTA 17

RESULT 906
AAV02582/c
ID      AAV02582 standard; DNA; 18 BP.
XX
XX      AC      AAV02582;
XX
XX      DT      04-AUG-1998 (first entry)
XX
XX      DE      Transcriptional activator fragment L5158.
XX
XX      KW      Activating sequence; Gal4; transcriptional activator; RNA polymerase;
XX      Protein-protein interaction; gene therapy; therapeutic; holoenzyme;
XX      Gall; DNA binding domain; ss.
XX
XX      OS      Synthetic.

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XX      PN      WO9744447-A2.
XX
XX      PD      27-NOV-1997.
XX
XX      PF      02-MAY-1997; 97WO-US007338.
XX
XX      PR      03-MAY-1996; 96US-0017016P.
XX      PR      01-MAY-1997; 97US-00017016.
XX
XX      PA      (HARD ) HARVARD COLLEGE.
XX
XX      PI      Ptashne M, Lu X, Wu Y;
XX
XX      DR      WPI; 1998-018502/02.
XX      DR      F-PSDB; AAW31484.
XX
XX      PT      New transcriptional activator containing DNA binding domain bound to
XX      peptide - useful for controlling gene expression, especially in gene
XX      therapy, and in protein-protein interaction assays, does not inhibit
XX      other transcription activators.
XX
XX      PS      Example 1; Page 27; 55pp; English.
XX
XX      CC      AAV02501-V02522, AAV02524-V02584, AAV02586-V02592 and AAV02594-V02616 are
XX      DNA fragments used in an assay to determine novel transcriptional
XX      activators. The method involves the production of transcriptional
XX      activators comprising of a DNA-binding group and a 6-25 amino acid
XX      peptide that is covalently bonded to the DNA binding group and does not
XX      represent a fragment of a natural transcription activator. Protein-
XX      protein interactions are identified in the assay by fusing a DNA-binding
XX      domain to a library of DNA fragments and introducing this and a fusion of
XX      target protein and a polypeptide containing a region of Gal4 which
XX      interacts with GalIP into a cell containing GalIP and identifying
XX      members of the library that interact with the target from activation of
XX      transcription. Such constructs are used to activate transcription in a
XX      cell, e.g. for controlling gene activity, particularly in gene therapy
XX      (e.g. recognizing a site close to a selected therapeutic gene).
XX      Transcription can be activated without blocking other transcriptional
XX      activators. They probably act by interacting with a component of the RNA
XX      polymerase II holoenzyme, GalII, the strongest known yeast activator,
XX      which provides a more sensitive assay allowing detection of even weak
XX      protein-protein interactions. Such activators do not create toxicity
XX      problems even when overexpressed
XX
XX      SQ      Sequence 18 BP; 2 A; 6 C; 4 G; 6 T; 0 U; 0 Other;
          Query Match      0.7%; Score 13.8; DB 1; Length 18;
          Best Local Similarity 88.2%; Pred. No. 8.7e+02;
          Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY      1474 GAAGCCAAAGGGGTCAA 1490
DB      18 GATGCCCAAGGGGTCAA 2

RESULT 907
AAZ41112/c
ID      AAZ41112 standard; DNA; 18 BP.
XX
XX      AC      AAZ41112;
XX
XX      DT      26-JAN-2000 (first entry)
XX
XX      DE      Human G-alpha-11 phosphorothioate antisense oligonucleotide #16.
XX
XX      KW      Identification; genetic target; gene modulation; human; probe;
XX      antisense oligonucleotide; phosphorothioate; PCR primer;
XX      nucleotide sequence-based technology; antisense drug discovery;
XX      target validation; ss.
XX
XX      OS      Synthetic.
XX      OS      Homo sapiens.

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XX WO9953101-A1.
 XX
 XX
 PD 21-OCT-1999.
 XX
 XX
 PF 13-APR-1999; 99WO-US008268.
 XX
 XX 13-APR-1998; 98US-0081483P.
 PR 28-APR-1998; 98US-00067638.
 XX
 XX (ISIS-) ISIS PHARM INC.
 PA
 XX
 XX Cowser LM, Baker BF, Mcneill J, Freier SM, Sasnor HM, Brooks DG;
 PI Ohasi C, Wyatt JR, Borchers AH, Vickers TA;
 PI
 XX WPI; 1999-620446/53.
 XX
 XX Identifying compounds which modulate expression of nucleic acids, used to
 PT provide compounds having defined physical, chemical or bioactive
 PT properties, e.g. antisense activity.
 PT
 XX Example 27; Page 108; 264pp; English.
 XX
 CC A method has been developed of defining a set of compounds that modulate
 CC the expression of a target nucleic acid (tNA) sequence via binding of the
 CC compounds with the tNA sequence. The method comprises generating a
 CC library of virtual compounds in silico according to defined criteria, and
 CC evaluating in silico the binding of the virtual compounds with the tNA
 CC according to defined criteria. Also described are: (1) a method of
 CC defining a set of oligonucleotides (ONs) that modulate the expression of
 CC a tNA sequence via binding of the ONs with the tNA sequence comprising
 CC generating a library of virtual compounds in silico according to defined
 CC criteria, and evaluating in silico the binding of the virtual ONs with
 CC the tNA according to defined criteria; and (2) a method of defining a set
 CC of compounds that modulate the expression of a tNA sequence via binding
 CC of the compounds with the tNA. The methods can be used for the generation
 CC and identification of synthetic compounds having defined physical,
 CC chemical or bioactive properties. Information gathered from assays of
 CC such compounds is used to identify nucleic acid sequences that are
 CC tractable to a variety of nucleotide sequence-based technologies, e.g.
 CC antisense drug discovery and target validation. AAZ40852 to AAZ41220, and
 CC AA52701 to AA52706, represent sequences used in the exemplification of
 CC the present invention
 XX
 SQ Sequence 18 BP; 4 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.8; DB 1; Length 18;
 Best Local Similarity 88.2%; Pred. No. 8.7e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 321 GTACAGCAAGCAGATGC 337
 Db 18 GTTCATCAAGCAGATGC 2
 RESULT 908
 AAZ28472/C
 ID AAZ28472 standard; DNA; 18 BP.
 XX
 AC AAZ28472;
 XX
 XX 05-JAN-2000 (first entry)
 XX
 DE Primer #2 for sequencing M-Sema H.
 XX
 XX Semaphorin H; Sema H; Sema Hv; collapsin; bone structure formation;
 KW metastasis; cancer; antibody; drug screen; primer; ss.
 KW
 XX Synthetic.
 OS Mus sp.
 OS
 XX WO9947671-A2.
 XX
 XX

PD 23-SEP-1999.
 XX
 XX 12-MAR-1999; 99WO-IB000495.
 XX
 XX 13-MAR-1998; 98US-0077997P.
 PR
 XX (LUKA/) LUKANIDIN E M.
 PA (CHRI/) CHRISTENSEN C R L.
 PA
 XX Lukanidin EM, Christensen CRL;
 PI
 XX WPI; 1999-590975/50.
 XX
 XX New polypeptides and polynucleotides, useful in diagnosis and treatment
 PT of metastatic cancer.
 PT
 XX Example 1; Page 58; 95pp; English.
 PS
 XX
 CC Primers AAZ28471-228472 are used when sequencing the mouse Semaphorin H
 CC (Sema H) polynucleotide sequence AAZ28469. The Semaphorin/Collapsin
 CC family of molecules are characterised by a unique and highly conserved
 CC motif, within a 500 amino acid semaphorin domain. Some semaphorins
 CC exhibit inhibitory or repulsive functions in a neuronal context, and
 CC functions in bone structure formation are also implicated. It is thought
 CC that Sema H plays a role in metastasis. The invention uses the mouse Sema
 CC H gene in the diagnosis of metastatic cancer. Semaphorin polynucleotides
 CC and polypeptides are used in the methods of the invention, the
 CC polypeptides are useful for determining the metastatic potential of
 CC cells, by detecting their expression in biological samples. Antibodies
 CC specific for Sema H, are also useful therapeutically in inhibiting Sema-H
 CC polypeptide activity and therefore metastasis, and for purifying the
 CC polypeptides. Metastasis may also be inhibited by inhibiting the
 CC biological activity of the polypeptide using e.g. a small molecule
 CC inhibitor or a Semaphorin-H ligand (or fragment). The polynucleotides can
 CC also be used to inhibit polypeptide expression in cells using known
 CC antisense technology e.g. to prevent metastasis of cancer cells. They can
 CC be used to detect and quantify Sema-H mRNA levels in cells. The
 CC polypeptides, fusion proteins, multimeric proteins, antibodies or
 CC antisense oligonucleotides can be included in pharmaceutical
 CC compositions. The polynucleotides can be used to isolate similar
 CC sequences from other species and to produce mammalian cell lines and
 CC tumours with known metastatic potential, useful in anti-metastatic drug
 CC screening
 XX
 SQ Sequence 18 BP; 6 A; 1 C; 9 G; 2 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.8; DB 1; Length 18;
 Best Local Similarity 88.2%; Pred. No. 8.7e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1553 GTTCTCTCCCAACCCC 1569
 Db 17 GTTCTCTCTCAACCCC 1
 RESULT 909
 AAZ19483/C
 ID AAZ19483 standard; DNA; 18 BP.
 XX
 AC AAZ19483;
 XX
 XX 15-NOV-1999 (first entry)
 XX
 DE Human G-alpha-11 phosphorothioate antisense oligonucleotide SEQ ID NO:23.
 XX
 KW Human; G-alpha-11; antisense oligonucleotide; inhibition; expression;
 KW phosphorothioate; ss.
 KW
 XX Synthetic.
 OS Homo sapiens.
 OS
 XX US5951455-A.
 XX
 XX

PD 14-SEP-1999.
XX
XX 04-DEC-1998; 98US-00205922.
XX
XX 04-DEC-1998; 98US-00205922.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Cowser LM;
XX
XX WPI; 1999-539140/45.
XX
XX Inhibitory antisense compounds useful for the treatment of diseases
PT associated with G-alpha-11.
XX
XX Claim 3; Col 40; 38pp; English.
XX
XX The present invention describes inhibitory antisense compounds of 8-30
CC nucleotides, targeted to a nucleic acid molecule encoding human G-alpha-
CC 11. AA219468 to AA219547 represent human G-alpha-11 phosphorothioate
CC antisense oligonucleotides given in the present invention. The
CC oligonucleotides may be useful for the treatment of diseases associated
CC with G-alpha-11
XX
XX Sequence 18 BP; 4 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
SQ

Query Match 0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 8.7e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX

QY 321 GTACAGCAGCAGATGC 337
DB 18 GTTCATCAAGCAGATGC 2
XX

RESULT 910
AAZ46981/C
ID AAZ46981 standard; DNA; 18 BP.
XX
XX AAZ46981;
XX
XX 14-APR-2000 (first entry)
XX
XX Bcl-XL mRNA specific antisense oligo K.
DE
XX Anti-apoptotic protein; bcl-XL; tumour; cancer; epithelial; prostate;
XX lung; bladder; bcl-2; vascular lesion; antisense; ss.
XX
XX Homo sapiens.
OS
XX WO200001393-A2.
PN
XX 13-JAN-2000.
PD
XX 02-JUL-1999; 99WO-US015250.
PF
XX 02-JUL-1998; 98US-00109614.
PR
XX (UYCO) UNIV COLUMBIA NEW YORK.
PA
XX Stein CA;
PI
XX WPI; 2000-137140/12.
DR
XX
XX New antisense oligonucleotides inhibiting the anti-apoptotic protein bcl-
PT XL, useful for reducing bcl-XL production in tumor cells to treat cancer
PT or in vascular cells to promote the regression of vascular lesions.
PT
XX Claim 1; Fig 1; 69pp; English.
PS
XX The invention provides antisense oligonucleotides or their derivatives
CC which reduce or eliminate expression of the anti-apoptotic protein bcl-
CC XL. The oligonucleotides can be introduced into tumour cells to reduce

CC bcl-XL production to treat cancer, especially epithelial cancer, e.g.
CC prostate, lung or bladder cancer. Oligonucleotides comprising one or more
CC bases with a C-5 propynyl pyrimidine modification may especially be used
CC to reduce levels of bcl-2 family proteins (to which bcl-XL belongs) in
CC such treatment. The oligonucleotides can be introduced into vascular
CC cells to reduce bcl-XL production to promote the regression of vascular
CC lesions. They can also be included with a carrier (and optionally tetra
CC meso-(4-methylpyridyl)porphine and/or tetra meso- (anilinium)porphine; in
CC pharmaceutical compositions, useful as above. Sequences AAZ46971-983
CC represent antisense oligos specific for the bcl-XL mRNA
XX
SQ Sequence 18 BP; 7 A; 5 C; 2 G; 4 T; 0 U; 0 Other;
XX

Query Match 0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 8.7e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX

QY 1762 GGATACCTTTTATGCAAC 1778
DB 18 GGATACCTTTTGTGAAC 2
XX

RESULT 911
AAA55624
ID AAA55624 standard; DNA; 18 BP.
XX
XX AAA55624;
AC
XX 30-AUG-2000 (first entry)
DT
XX TRAF4 antisense oligonucleotide ISIS# 26884.
DE
XX Tumour necrosis factor receptor-associated factor; TRAF; human;
XX antisense oligonucleotide; phosphorothioate; antiproliferative;
KW anti-inflammatory; E-selectin; jun kinase; ss.
KW
XX Synthetic.
OS
XX WO2000020435-A1.
PN
XX 13-APR-2000.
PD
XX 05-OCT-1999; 99WO-US023171.
PF
XX 06-OCT-1998; 98US-00167109.
PR
XX (ISIS-) ISIS PHARM INC.
PA
XX Baker BF, Cowser LM, Monia BP, Xu XS;
PI
XX WPI; 2000-303732/26.
DR
XX
XX Antisense oligonucleotides targeted to nucleic acids encoding human tumor
PT necrosis factor receptor-associated factor (TRAF), useful for treating
PT diseases associated with TRAF expression such as inflammatory diseases.
PT
XX Example 19; Page 60; 170pp; English.
PS
XX The present invention relates to antisense oligonucleotides (see AAA55496
CC -A55757) which are targeted to nucleic acids encoding a human tumour
CC necrosis factor receptor-associated factor (TRAF). The antisense
CC sequences comprise at least one modified internucleotide linkage, which
CC is a phosphorothioate linkage. The oligonucleotides also include at least
CC one modified sugar moiety such as a 2'-O-methoxyethyl sugar moiety.
CC Sequences AAA55490-A55495 represent nucleotide sequences encoding human
CC TRAF1-6. Included in the invention is a method for treating a human
CC having a disease associated with the expression of TRAF comprising
CC administering an antisense oligonucleotide. The reduction of jun kinase
CC activation in cells comprises contacting the cells with an antisense
CC oligonucleotide targeted to TRAF-6. A method for the reduction of E-
CC selectin expression in cells or tissues comprises contacting the cells or
CC tissues with an antisense oligonucleotide targeted to TRAF-2 or TRAF-6.
CC The antisense oligonucleotides have antiproliferative and anti-

CC inflammatory activity and are useful for treating disorders associated
CC with cell proliferation and inflammation. The antisense oligonucleotides
CC may also be used as a diagnostic probe for studying gene function
XX
SQ Sequence 18 BP; 5 A; 6 C; 4 G; 3 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 8.7e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1218 TGAGGAGCGCCATCCCTG 1234
Db 2 TGAGCAGCCATCACTG 18
RESULT 912
ID AAZ30180 standard; DNA; 18 BP.
XX AAZ30180;
AC
XX
DT 11-FEB-2000 (first entry)
XX
DE PCR primer Hmc30 used to amplify a fragment of the hmc gene.
XX
KW hmc gene; 3-hydroxy-3-methylglutaryl-CoA synthase; HMG-CoA synthase;
KW mevalonate pathway; carotenogenic yeast; isopentenyl pyrophosphate;
KW farnesyl pyrophosphate; isoprenoid; carotenoid; astaxanthin; cancer;
KW antioxidant; colouring reagent; farmed fish industry; PCR primer; ss.
XX
OS Synthetic.
OS Xanthophyllomyces dendrorhous.
XX
XX EP955363-A2.
XX
PD 10-NOV-1999.
XX
FF 26-APR-1999; 99EP-00107413.
XX
PR 06-MAY-1998; 98EP-00108210.
XX
PA (HOFF) HOFFMANN LA ROCHE & CO AG F.
XX
PI Hoshino T, Ojima K, Setoguchi Y;
XX
DR WPI; 2000-001086/01.
XX
PS Isolated DNA sequences encoding enzymes, useful for the production of
PT isoprenoids and carotenoids.
XX
XX Example 6; Page 10; 58pp; English.
PS
XX PCR primers AAZ30180-81 were used to amplify a fragment of the hmc gene.
CC The hmc gene encodes a 3-hydroxy-3-methylglutaryl-CoA synthase (HMG-CoA
CC synthase) enzyme. The enzyme is involved in the mevalonate pathway in the
CC carotenogenic yeast *Phaffia rhodozyma*. The specification also describes
CC enzymes that are involved in the pathway from isopentenyl pyrophosphate
CC to farnesyl pyrophosphate. The enzymes of the invention are used in the
CC production of isoprenoids and carotenoids, especially astaxanthin.
CC Astaxanthin is useful for the pharmaceutical industry, to protect cells
CC against cancer as it has a strong antioxidant property. Astaxanthin is
CC also useful as a colouring reagent in the farmed fish industry, e.g.
CC salmon.
XX
SQ Sequence 18 BP; 11 A; 2 C; 5 G; 0 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 8.7e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1466 AGAAGCCAGAGCCAAA 1482
Db 1 AGAAGCCAGAGAGAAA 17

RESULT 913
ID AAZ69587/c standard; DNA; 18 BP.
XX
AC AAZ69587;
XX
DT 10-SRP-2001 (first entry)
XX
DE Human biallelic marker upstream amplification primer SEQ ID NO:3943.
XX
KW Human genome; biallelic marker; high density disequilibrium map;
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW haplotyping; hybridisation; identification; characterisation;
KW amplification; single nucleotide polymorphism; SNP; PCR primer;
KW diagnosis; ss.
XX
OS Homo sapiens.
XX
XX WO9954500-A2.
XX
PD 28-OCT-1999.
XX
XX 21-APR-1999; 99WO-IB000822.
XX
XX 21-APR-1998; 98US-0082614P.
PR 23-NOV-1998; 98US-0109732P.
XX
XX (GEST) GENSET.
FA
XX
XX Cohen D, Blumenfeld M, Chumakov I;
XX
XX WPI; 2000-013267/01.
XX
PT Novel biallelic markers used to construct a high density disequilibrium
PT map of the human genome.
XX
XX Claim 8; Page 1072; 2745pp; English.
XX
CC AAZ65654 to AAZ69578 represent human biallelic markers from the present
CC invention, which contain a polymorphic base at position 24 of their
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
CC primers for the biallelic markers. The biallelic markers of the invention
CC have a variety of uses: they can be used for high density mapping of the
CC human genome, and in complex association studies and haplotyping studies
CC which are useful in determining the genetic basis for disease states.
CC Compositions and methods of the invention can also be useful for the
CC identification of the targets for the development of pharmaceutical
CC agents and diagnostic methods, as well as the characterisation of the
CC differential efficacious responses to and side effects from
CC pharmaceutical agents acting on a disease as well as other treatment.
CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
CC 3367, are not actually given a sequence in the Sequence Listing from the
CC present invention
XX
SQ Sequence 18 BP; 4 A; 7 C; 1 G; 6 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 8.7e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 907 GCCAAGTGTGTGGAATT 923
Db 18 GACAAAGTGTGTGGAAT 2

RESULT 914
ID AAA48807/c standard; DNA; 18 BP.
XX
XX AAA48807;
AC
XX

DT XX 08-SEP-2000 (first entry)

DE XX Human G-alpha-16 antisense oligonucleotide ISIS# 20865.

XX XX Human; G-alpha-16; G protein; cytostatic; hyperproliferative disorder;

KW XX cancer; inflammation; infection; antisense inhibition; ss.

OS XX Homo sapiens.

XX XX WO200032817-A1.

PN XX 08-JUN-2000.

XX XX 25-AUG-1999; 99WO-US019613.

PF XX 03-DEC-1998; 98US-00205143.

XX XX (ISIS-) ISIS PHARM INC.

PA Cowseert LM;

PI WPI; 2000-412354/35.

XX XX A new antisense compound for inhibiting the expression of human G-alpha-16 and treating, preventing or delaying infections, inflammation or hyperproliferative disorders such as cancer.

PT Claim 3; Page 73; 100pp; English.

XX XX The present sequence is an antisense oligonucleotide used to modulate expression of G-alpha-16. G-alpha-16 is a human G protein which interacts differentially with several receptor types including members of the opicoid and chemokine receptor families. A series of antisense oligonucleotides have been designed to target different regions of the human G-alpha-16 RNA. They may be used to inhibit the expression of G-alpha-16 in human cells and tissues and thus to treat diseases associated with G-alpha-16, such as hyperproliferative disorders, especially cancer. Infections, inflammation or tumour formation can be prevented or delayed. The compounds can be used in research and diagnostics in sandwich and other assays. Note: The sequence has a phosphorothioate backbone and may be either an oligodeoxynucleotide or a chimeric oligonucleotide containing 2'-methoxyethyl (2'-MOE) wings and a deoxy gap. The ISIS number given above corresponds to the oligodeoxynucleotide sequence

XX XX Sequence 18 BP; 3 A; 4 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 18;

Best Local Similarity 88.2%; Pred. No. 8.7e+02;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1135 TACCTGGAGAGATCAA 1151

DB 18 TACCTGGAGAGATCAA 2

RESULT 915

AAF76196/c

ID AAF76196 standard; DNA; 18 BP.

XX XX AAF76196;

AC AAF76196;

XX 05-JUN-2001 (first entry)

DT Human TAP-2 PCR primer, SEQ ID NO:62.

DE Transgenic mouse; immunodeficient; tissue recipient;

XX lymphocyte deficient; human cytokine; interleukin; IL-7; IL-6; SCF; LIF;

KW stem cell factor; leukaemia inhibitory factor; GM-CSF; M-CSF;

KW granulocyte macrophage-colony stimulating factor;

KW macrophage-colony stimulating factor; human MHC class II; DR3;

KW major histocompatibility complex; allergenicity determination;

KW human monoclonal antibody generation; haematopoietic cell development;

KW human immune system animal model; PCR primer; ss.

XX OS Homo sapiens.

XX PN WO200115521-A1.

XX PD 08-MAR-2001.

XX PF 30-AUG-2000; 2000WO-US023971.

XX PR 31-AUG-1999; 99US-0151688P.

XX XX (GEMV) GENENCOR INT INC.

XX PI Huang MA, Harding FA;

XX DR WPI; 2001-169001/17.

XX XX New transgenic mice, useful as non-human mammalian models of human disease, comprise recombination activation gene mutations and donor specific transgenes encoding cytokines.

PT Example 4; Page 47; 68pp; English.

XX XX The invention relates to a transgenic immunodeficient recipient mouse which is capable of supporting the growth of donor cells. In the mouse, both alleles of a gene activated in early lymphocyte development are disrupted, causing it to lack mature B and T cells. In particular, both alleles of the recombination activation gene-2 (RAG-2) gene are disrupted, which in turn prevents VDJ recombination. The mouse also comprises donor (e.g., human) specific transgenes encoding the cytokines interleukin-7 (IL-7), stem cell factor (SCF), leukaemia inhibitory factor (LIF), granulocyte macrophage-colony stimulating factor (GM-CSF), macrophage-colony stimulating factor (M-CSF), and IL-6, which enable it to support the growth of transplanted donor cells. In another embodiment of the invention, the mouse comprises DNA encoding the human major histocompatibility complex (MHC) class II DR3 molecule, where the transgene has a naturally linked DRab and DQab alleles. The transgenic mouse may be used as a model for determining the allergenicity of non-donor, e.g., non-human, macromolecules; to determine the effect compounds have on a human immune system; to generate fully human polyclonal or monoclonal antibodies to specific antigens; to determine whether humanised or other monoclonal antibodies will raise a response in a human immune system; to investigate the human cell mediated response to pathogens and other immunomodulatory compounds; and to determine the factors involved in regulating the development and function of human haematopoietic cells. The transgenic mouse supports the functional properties of human haematopoietic cells, unlike previous animal models which produce functionally impaired haematopoietic cells or are immunologically dysfunctional. In addition the transgenic mouse provides a unique model system which supports T cell development in a manner which more closely resembles normal ontogeny, as they possess CD4+ T cells in the periphery that exhibit MHC-restricted antigen- specific responses. Sequences AAF76193-AAF76204 represent PCR primers used to determine the presence of a YAC containing a 550kb segment of the human MHC class II region in murine embryonic stem (ES) cells

XX XX Sequence 18 BP; 5 A; 6 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 18;

Best Local Similarity 88.2%; Pred. No. 8.7e+02;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 941 TGCCTATGCTGATGCTG 957

DB 18 TGCAGATGCTGATGCTG 2

RESULT 916

AAH74221

ID AAH74221 standard; DNA; 18 BP.

XX XX AAH74221;

AC AAH74221;

XX XX

DT 15-OCT-2001 (first entry)
 XX Oligonucleotide derived from a Varicella virus.
 DE
 XX
 XX Pox vaccine; vaccine; poxvirus disease; chickenpox; ss.
 KW
 XX Varicella virus.
 OS
 XX
 XX WO200156600-A1.
 PN
 XX
 XX 09-AUG-2001.
 PD
 XX
 XX 31-JAN-2001; 2001WO-JP000678.
 PF
 XX
 XX 31-JAN-2000; 2000JP-00062734.
 PR
 XX
 XX (OSAU) UNIV OSAKA.
 PA
 XX
 XX Gomi Y, Sunamachi H, Takahashi M, Yamanishi K;
 PI
 XX WPI; 2001-488845/53.
 DR
 XX
 XX Method for checking absence of mutation at specific positions of
 PT varicella virus genome for quality control of attenuated live varicella
 PT vaccine.
 PT
 XX
 XX Claim 8; Page 55; 158pp; Japanese.
 PS
 XX
 XX The present sequence is derived from a Varicella virus. The specification
 CC describes a method for the quality control of an attenuated pox vaccine,
 CC characterised in that the DNA sequence of specific parts of the viral
 CC genome in a sample is determined and proved to be conserved rather than
 CC mutated in comparison with the same parts of a reference viral genome.
 CC The method is useful for quality control of vaccines for use in the
 CC prevention of poxvirus diseases such as chickenpox
 CC
 XX
 XX Sequence 18 BP; 5 A; 4 C; 7 G; 2 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 13.8; DB 1; Length 18;
 Best Local Similarity 88.2%; Pred. No. 8.7e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 751 GACGGATTGATGACGA 767
 |||||
 DB 2 GACGGATTGACGACGA 18
 RESULT 917
 ABA82529
 ID ABA82529 standard; DNA; 18 BP.
 XX
 XX ABA82529;
 AC
 XX
 XX 25-JAN-2002 (first entry)
 DT
 XX
 XX Zmax1 gene region physical map preparation STS marker #488.
 DE
 XX
 XX Human; high bone mass; HBM gene; Zmax1 gene; chromosome 11; 11q13.3;
 KW sequence tagged site; STS; osteoporosis; osteopathic; gene therapy;
 KW antisense therapy; vaccine; bone disorder; Paget's disease; adapter;
 KW sclerostosis; osteomalacia; fibrous dysplasia; PCR primer; linker; ss.
 XX
 XX Homo sapiens.
 OS
 XX Synthetic.
 OS
 XX WO200177327-A1.
 PN
 XX
 XX 18-OCT-2001.
 PD
 XX
 XX 21-JUN-2000; 2000WO-US016951.
 PF
 XX
 XX 05-APR-2000; 2000US-00543771.
 PR
 XX
 XX 05-APR-2000; 2000US-00544398.
 PR

XX (GENO-) GENOME THERAPEUTICS CORP.
 PA
 XX Carulli JP, Little RD, Recker RR, Johnson ML;
 PI
 XX WPI; 2001-657171/75.
 DR
 XX
 XX New high bone mass (HBM) and Zmax1 genes and proteins useful for
 PT modulating bone mass for the treatment of e.g. osteoporosis.
 PT
 XX
 XX Disclosure; Page 36; 443pp; English.
 PS
 XX
 XX The present invention describes the human Zmax1 gene and the high bone
 CC mass (HBM) gene, which are found on chromosome 11q13.3. The Zmax1 and HBM
 CC genes have osteopathic activities. The genes can be used in gene therapy,
 CC antisense therapy and in the production of vaccines. They can be used in
 CC the diagnosis and treatment of bone disorders including osteoporosis,
 CC Paget's disease, sclerostosis, osteomalacia and fibrous dysplasia.
 CC ABA82038 to ABA82700 and AAG68168 to AAG68193 represent sequences used in
 CC the exemplification of the present invention
 CC
 XX
 XX Sequence 18 BP; 5 A; 6 C; 5 G; 2 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 13.8; DB 1; Length 18;
 Best Local Similarity 88.2%; Pred. No. 8.7e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 670 GAGTACTTCCCGAGAAC 686
 |||||
 DB 2 GAGTACTTCCCGAGAAC 18
 RESULT 918
 ABL43002/C
 ID ABL43002 standard; DNA; 18 BP.
 XX
 XX ABL43002;
 AC
 XX
 XX 11-APR-2002 (first entry)
 DT
 XX
 XX Human chromosome 1p36-35 PCR primer SEQ ID NO:46.
 DE
 XX
 XX Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
 KW PCR primer; ss.
 KW
 XX Homo sapiens.
 OS
 XX JP2001321190-A.
 FN
 XX
 XX 20-NOV-2001.
 PD
 XX
 XX 12-MAR-2001; 2001JP-00068285.
 PF
 XX
 XX 10-MAR-2000; 2000JP-00066716.
 PR
 XX
 XX (RIKA) RIKAGAKU KENKYUSHO.
 PA (GENO-) GENOTEX YG.
 PA
 XX WPI; 2002-144136/19.
 DR
 XX
 XX Arraying genome clones.
 PT
 XX
 XX Claim 4; Page 5; 528pp; Japanese.
 PS
 XX
 XX The present invention describes a method of arraying genome clones. The
 CC method comprises: (a) clones of the genomic libraries contained in
 CC multiwell plates numbered for discrimination are mixed in each of the
 CC multiwell plates; (b) a primer designed based on the chromosome marker
 CC sequence is added to the mixture to carry out an amplification reaction;
 CC (c) a signal corresponding to the marker is detected from the resultant
 CC amplified product to specify the discrimination Nos. of the multiwell
 CC plates containing the clones having said marker sequence; (d) the order
 CC of the markers is changed so that the same discrimination Nos. succeed to

CC the maximum in the specified discrimination Nos. to array the multiwell
CC plates; (e) the clones in the multiwell plates of the specified
CC discrimination Nos. are mixed respectively in each wells of longitudinal
CC and lateral directions; (f) the mixed clones are cultured and the
CC resultant cultures are amplified by using the above primer; (g) signals
CC are detected from the amplified products; (h) the clones in the multiwell
CC plates are specified from the detected result; and (i) the clones are
CC reconstituted as the positions on the chromosome and arrayed. The
CC microarray is useful for gene analysis. ABL42957 to ABL45322 represent
CC PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634
CC represent PCR primers for human chromosome 21q22.1, which are
CC specifically claimed for use in the present invention
XX
SQ Sequence 18 BP; 4 A; 7 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 8.7e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1229 TCCTTGAGGAGTGCC 1245
||||| |||||
Db 17 TCCTTGAGGAGTGCC 1

RESULT 919
ABK23326
ID ABK23326 standard; DNA; 18 BP.
XX
AC ABK23326;
XX
DT 09-APR-2002 (first entry)
XX
DE Human Zmax1 cDNA reverse PCR primer #244.
XX
KW Human; mouse; Zmax1; HBM; high bone mass gene; lipid regulation; stroke;
KW lipid-associated condition; arteriosclerosis; cardiovascular disease; ss;
KW osteoporosis; atherosclerosis; diabetic atherosclerosis; plaque build-up;
KW neurovascular condition; wound healing; gene therapy; PCR primer; probe;
KW bone development disorder; antiarteriosclerotic; cardiovascular;
KW osteopathic; cerebroprotective.
XX
OS Homo sapiens.
XX
PN WO200192891-A2.
XX
PD 06-DEC-2001.
XX
PF 25-MAY-2001; 2001WO-US016946.
XX
PR 26-MAY-2000; 2000US-00578900.
XX
PA (GENO-) GENOME THERAPEUTICS CORP.
PA (UYCR-) UNIV CREIGHTON SCHOOL MEDICINE.
XX
PI Carulli JP, Little RD, Recker RR, Johnson ML;
XX WPI; 2002-097784/13.
DR
XX
PT Identifying molecules involved in lipid regulation, useful for
PT diagnosing, treating or preventing e.g., arteriosclerosis, comprises
PT identifying a molecule that binds to high bone mass gene or its
PT corresponding wild type gene.
XX
PS Disclosure; Page 41; 409pp; English.
XX
CC The invention relates to a method for identifying a molecule involved in
CC lipid regulation comprising identifying a molecule that binds to or
CC inhibits binding of a molecule to high bone mass (HBM) or its wild type
CC gene, Zmax1. Compounds identified by the method are useful for treating,
CC diagnosing, preventing or screening for normal and abnormal lipid-
CC associated conditions, including arteriosclerosis, cardiovascular
CC disease, stroke, and osteoporosis. The compounds may also be used in the
CC treatment or prevention of diabetic atherosclerosis, neurovascular

CC conditions caused by plaque build-up, poor circulation due to plaque
CC build-up and associated poor wound healing. The methods may be used in
CC gene therapy, pharmaceutical development, and diagnostic assays for bone
CC development disorders. Molecules identified by comparison of Zmax1 and
CC HBM systems can be used as surrogate markers in pharmaceutical
CC development, in diagnosis of human or animal bone disease, and in the
CC treatment of bone diseases. Sequences ABK22776-ABK23411 represent cDNA
CC molecules encoding human Zmax1 and HBM, and PCR primers, probes, linkers
CC and adapters of the invention
XX
SQ Sequence 18 BP; 5 A; 6 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 8.7e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 670 GAGTACTTCCCAGGAAC 686
||||| |||||
Db 2 GAGTACATCCCAGGACC 18

RESULT 920
AAL44978
ID AAL44978 standard; DNA; 18 BP.
XX
AC AAL44978;
XX
DT 14-MAY-2002 (first entry)
XX
DE Malignant disease treatment oligonucleotide.
XX
KW Cancer; malignant disease; nucleolin inhibition; cytostatic;
KW cervical carcinoma; human papilloma virus; gene therapy; ds.
XX
OS Unidentified.
XX
PN DE10037861-A1.
XX
PD 14-FEB-2002.
XX
PF 01-AUG-2000; 2000DE-01037861.
XX
PR 01-AUG-2000; 2000DE-01037861.
XX
PA (DELB-) DELBRUECK CENT MOLEKULARE MEDIZIN MAX.
PI Juerchott K, Bergmann S, Royer H;
XX WPI; 2002-189242/25.
DR
XX
PT Composition for treating malignant disease, useful especially for
PT cervical carcinoma, contains agent that inhibits activity of nucleolin.
XX
PS Claim 13; Col 3; 3pp; German.
XX
CC The present invention relates to a composition for treating malignant
CC disease, containing at least one substance that inhibits the activity of
CC nucleolin in vivo. The composition can be used to treat malignancies that
CC are dependent on human papilloma virus, especially cervical carcinoma.
CC The present sequence may be used in the composition of the invention
XX
SQ Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 8.7e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 594 TCACCATGTCACGGCG 610
||||| |||||
Db 1 TCACCATGATGGCGCG 17

RESULT 921

KW osteomalacia; rickets; Paget's disease; neoplasm of the bone; primer; ss.
XX Homo sapiens.
XX WO200292764-A2.
PN 21-NOV-2002.
XX 13-MAY-2002; 2002WO-US014876.
XX 11-MAY-2001; 2001US-0290071P.
PR 17-MAY-2001; 2001US-0291311P.
PR 01-FEB-2002; 2002US-0353058P.
PR 04-MAR-2002; 2002US-0361293P.
XX (GENO-) GENOME THERAPEUTICS CORP.
PA (AMHP) WYETH.
XX Babij P, Bex FJ, Yaworsky PJ, Bodine PV;
PI WPI; 2003-129278/12.
DR New transgenic animals (e.g. mice), useful as models for studying bone
XX density modulation, developing drugs for treating or preventing bone
PT diseases (e.g. osteoporosis), or diagnosing diseases characterized by
PT reduced bone density.
XX Disclosure; Page 58; 603pp; English.
PS The invention relates to novel transgenic animals expressing the high
XX bone mass (HBM) gene, expressing the corresponding wild type HBM gene,
CC comprising an alteration of the gene encoding LRP5 or LRP6, or expressing
CC an LRP5 that is modulated by an altered gene control sequence introduced
CC by homologous or non-homologous recombination. The transgenic animals are
CC for the study of bone density modulation or bone mass modulation. The
CC invention has osteopathic and cytostatic activity. The polynucleotides of
CC the invention may have a use in gene therapy. The transgenic animals and
CC nucleic acids are for the study of bone density modulation, where the
CC bone mass is modulated relative to non-transgenic animals of the same
CC species in more than one parameter selected from bone density, bone
CC strength, trabecular number, bone size, or bone tissue connectivity. The
CC transgenic animals, nucleic acids and methods are useful for identifying
CC molecules involved in bone development, and for developing pharmaceutical
CC compositions, which may be employed for treating or preventing bone
CC diseases, e.g. osteoporosis, osteomalacia, rickets, Paget's disease, or
CC neoplasms of the bone. The transgenic animals and nucleic acids are also
CC useful in methods for diagnosing diseases involved in bone development,
CC or characterised by reduced bone density or mass. The present sequence is
CC used in the exemplification of the invention
XX
SQ Sequence 18 BP; 5 A; 6 C; 5 G; 2 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 88.2%; Pred. No. 8.7e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 670 GAGTACTTCCCGAGGAC 686
DB 2 GAGTACATCCCGAGGACC 18
RESULT 924
ACC83657
ID ACC83657 standard; RNA; 18 BP.
XX ACC83657;
AC 08-SEP-2003 (first entry)
XX
DT Fragile X mental retardation protein mRNA ligand scl.
XX
DE Fragile X syndrome; fragile X mental retardation protein; FMRP;
XX
KW nontropic; ss.

XX Synthetic.
OS WO2003041659-A2.
XX 22-MAY-2003.
XX 15-NOV-2002; 2002WO-US036861.
XX 15-NOV-2001; 2001US-0336249P.
XX (UYEM-) UNIV EMORY.
PA (UYDU-) UNIV DUKE.
PA (UYEQ) UNIV ROCKEFELLER.
XX Warren ST, Brown-Kennery V, Jin P, Ceman S, Darnell RB;
PI Darnell JC, Keene JD, Tenenbaum SA;
PI WPI; 2003-523117/49.
DR New fragile X mental retardation protein target nucleic acid sequences
XX useful for identifying compounds that modulate the translational profile
PT of the nucleic acid molecule in wild-type or fragile X cells.
PT Claim 1; Fig 1; 80pp; English.
XX The present sequence is that of an RNA target (scl) of fragile X mental
CC retardation protein (FMRP). Baculoviral histidine-tagged FMRP was used to
CC bind a pool of 32P-UTP labelled 96-mer RNAs containing 52 bases of random
CC sequence. FMRP was eluted with imidazole, and co-eluting RNAs were
CC pooled, amplified by RT-PCR, and retranscribed for subsequent RNA
CC selection. 9 Rounds of selection were performed. 5 Unique sequences (scl-
CC sc5) were identified in round 9 clones, and an additional clone (sc6) in
CC round 8. The clones have the consensus sequence given in ACC84664. FMRP
CC nucleic acid targets of the present invention can be used in high-
CC throughput screens to assay candidate compounds for the ability to
CC modulate the translation profile of the target nucleic acid in a wild-
CC type or fragile X cell. Compounds can be identified that increase or
CC decrease the translational profile. Arrays for identifying compounds,
CC protein, nucleotides etc. that modulate RNA targets of FMRP or associated
CC genes are provided
XX
SQ Sequence 18 BP; 3 A; 1 C; 11 G; 0 T; 3 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 18;
Best Local Similarity 70.6%; Pred. No. 8.7e+02;
Matches 12; Conservative 3; Mismatches 2; Indels 0; Gaps 0;
QY 1849 TAGAAGGGGTGGCTGGG 1865
DB 2 UGGAAGGAGAGGCGCGGG 18
RESULT 925
ADB98607
ID ADB98607 standard; DNA; 18 BP.
XX ADB98607;
AC 04-DEC-2003 (first entry)
XX
DT Sequence tagged site #488 used to prepare Zmax1 (LRP5) gene region map.
XX
DE Osteopathic; Gene therapy; High Bone Mass; HBM; LRP5; Zmax1; LRP6;
XX bone mass modulation; osteoporosis; STS; sequence tagged site; ds.
XX Homo sapiens.
OS WO200292000-A2.
XX 21-NOV-2002.
XX 13-MAY-2002; 2002WO-US014877.

XX 11-MAY-2001; 2001US-0290071P.
 PR 17-MAY-2001; 2001US-0291311P.
 PR 01-FEB-2002; 2002US-0353058P.
 PR 04-MAR-2002; 2002US-0361293P.
 XX (GENO-) GENOME THERAPEUTICS CORP.
 PA (AMHP) WYETH.
 XX
 PI Allen K, Anisowicz A, Graham JR, Morales A, Yaworsky PJ, Liu W;
 XX WPI; 2003-129214/12.
 DR
 XX New nucleic acid comprising a mutation in LRP5 or LRP6, useful for
 PT diagnosing a HEM-like phenotype in a subject and for preparing a
 PT composition for modulating bone mass and/or lipid levels in a subject
 PT suffering from e.g. osteoporosis.
 XX
 XX Example 2; Page 64; 629pp; English.
 PS The present invention relates to High Bone Mass (HBM), LRP5 (Zmax1) and
 CC LRP6 mutants, which results in a HBM-like phenotype when expressed in a
 CC cell. The HBM-like phenotype results in bone mass modulation and/or lipid
 CC level modulation. The invention is useful for diagnosing a HBM-like
 CC phenotype in a subject and for preparing a composition for modulating
 CC bone mass and/or lipid levels in a subject suffering from e.g.
 CC osteoporosis. The present sequence is a Sequence Tagged Site (STS)
 CC marker, which was used to prepare a physical map of the Zmax1 (LRP5) gene
 CC region.
 XX
 XX Sequence 18 BP; 5 A; 6 C; 5 G; 2 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 13.8; DB 1; Length 18;
 Best Local Similarity 88.2%; Pred. No. 8.7e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 670 GAGTACTTCCAGGAAAC 686
 |||||
 Db 2 GAGTACATCCAGGACC 18
 RESULT 926
 AAQ26127/c
 ID AAQ26127 standard; DNA; 19 BP.
 AC AAQ26127;
 XX
 XX 25-MAR-2003 (revised)
 DT 04-JAN-1993 (first entry)
 XX
 XX HLA-DR beta sub-type tailed probe DRB20 hybridising region.
 DE
 XX Tissue typing; identity determination; disease susceptible; ss.
 KW
 XX Synthetic.
 OS
 XX WO9210589-A1.
 PN
 XX 25-JUN-1992.
 PD
 XX 06-DEC-1991; 91WO-US009294.
 PF
 XX 06-DEC-1990; 90US-00623098.
 PR
 XX (HOFF) HOFFMANN LA ROCHE & CO AG F.
 PA
 XX Erlich HA, Begovich AB, Bugawan T, Griffith RL, Scharf SJ;
 PI Apple RJ;
 XX
 XX WPI; 1992-234644/28.
 DR
 XX Method for determining HLA-DR beta sub-type in DNA sample - comprises
 PT amplification and hybridisation with probes and primers, useful in tissue

PT typing.
 XX
 PS Example; Page 37; 90pp; English.
 XX
 CC The sequence is that of the hybridising region of tailed probe DRB20 for
 CC use in a method for determining HLA-DR beta sub-type in a nucleic acid
 CC sample. The method allows specific nucleic acid sequences of the second
 CC exon of HLA-DR beta genes to be amplified then probed for identification
 CC of polymorphic sequences. The amplified DNA is useful for typing
 CC homozygous or heterozygous samples from a variety of sources and for
 CC detecting allelic variants not distinguishable by serological methods.
 CC The typing system can be used in a reverse dot blot format which is
 CC simple and rapid to perform, produces detectable signals in minutes and
 CC can be utilised in tissue typing, determination of individual identity
 CC and identifying disease susceptible individuals. Preliminary testing
 CC shows that the probe is more preferred than others. See also AAQ26092-
 CC Q26367. (Updated on 25-MAR-2003 to correct PN field.)
 XX
 XX Sequence 19 BP; 5 A; 9 C; 0 G; 5 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 13.8; DB 1; Length 19;
 Best Local Similarity 88.2%; Pred. No. 9.4e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1491 GGAGGAGGTCAGTTGG 1507
 |||||
 Db 19 GGAGGAGGTTAGTTTG 3
 RESULT 927
 AAQ77799/c
 ID AAQ77799 standard; DNA; 19 BP.
 AC AAQ77799;
 XX
 XX 25-MAR-2003 (revised)
 DT 13-JUL-1995 (first entry)
 XX
 XX Primer for amplifying human muscarine M2 receptor gene.
 DE
 XX Dictyostelium discoideum; primer; muscarine M2 receptor; assay; cAMP;
 KW aggregate; transformed cells; ss.
 XX
 XX Synthetic.
 OS
 XX DE4313933-A1.
 PN
 XX 03-NOV-1994.
 PD
 XX 28-APR-1993; 93DE-04313933.
 PF
 XX 28-APR-1993; 93DE-04313933.
 PR
 XX (DING/) DINGERMANN T.
 PA
 XX Dingermann T;
 PI
 XX WPI; 1994-342635/43.
 DR
 XX Human receptor agonist and antagonist assay system - by expression of,
 PT e.g. human muscarine M2 receptor in Dictyostelium discoideum (D) and
 PT detection of response.
 XX
 XX Example 2; Col 4; 6pp; German.
 PS
 XX Two primers (AAQ77798, AAQ77799) were used to amplify the human muscarine
 CC M2 receptor from the plasmid pCD.hm2. The amplified gene may be placed
 CC under the control of the Dictyostelium discoideum actin 6 promoter for
 CC use in a simple microbiological assay system which detects and
 CC characterises receptor agonists and antagonists. The Dictyostelium
 CC discoideum has a receptor (cAMP receptor) which is structurally of the
 CC same class as the human muscarine M2 receptor. The receptor recognises
 CC extracellular cAMP which allows cells to move along a cAMP gradient.

CC Therefore, positively reacting cells aggregate. Dictyostelium discoideum
CC transformed with a muscarine M2 receptor gene will chemotactically react
CC to the receptor against carbachol in an analogous manner to its reaction
CC to cAMP. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 19 BP; 5 A; 4 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 9.4e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1839 TTGACATCTTAGAGG 1855
Db 17 TTGAAAAATCTAGAGG 1

RESULT 928
AA76199/c
ID AA76199 standard; DNA; 19 BP.
XX
AC AA76199;
XX
DT 12-SEP-1997 (first entry)
DE Human IL4 receptor antisense oligonucleotide.
XX
KW Asthma; airway epithelium; adenosine free; cystic fibrosis;
KW chronic obstructive pulmonary disease; bronchitis; interleukin; ss.
XX
OS Synthetic.
XX WO9640162-A1.
PN
XX
PD 19-DEC-1996.
PF 06-JUN-1996; 96WO-US009306.
XX
PR 07-JUN-1995; 95US-00474497.
XX
PA (UYEC-) UNIV EAST CAROLINA.
XX
PI Nyce JW, Metzger WJ;
XX
DR WPI; 1997-051871/05.
XX
PT Treatment of airway diseases such as asthma - by topically applying
PT adenosine-free antisense oligo:nucleotide to airway epithelium of
PT subject.
XX
PS Example 5; Page 30; 71pp; English.

XX A method for treating airway disease in a subject has been produced,
CC which involves the topical administration of an essentially adenosine
CC free antisense oligonucleotide (ON) to the airway epithelium of the
CC subject. The present sequence is an antisense oligonucleotide specific
CC for the human IL4 receptor. The method can be used to treat airway
CC diseases such as cystic fibrosis, asthma, chronic obstructive pulmonary
CC disease, bronchitis and other airway diseases characterised by an
CC inflammatory response. By eliminating adenosine from the antisense ON,
CC its liberation upon antisense degradation is prevented, thereby
CC preventing adenosine-induced bronchoconstriction in patients with hyper-
CC reactive airways

SQ Sequence 19 BP; 0 A; 8 C; 1 G; 10 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 9.4e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1398 AGAGGATGAAAAGAGA 1414
Db 19 AGAGGAGAAAAGGGA 3

RESULT 929
AA52736/c
ID AA52736 standard; DNA; 19 BP.
XX
AC AA52736;
XX
DT 30-JUN-1999 (first entry)
XX
DE Human genome biallelic marker primer 104.
XX
KW Biallelic marker; human; high density disequilibrium map; disease; trait;
KW identification; Alzheimer's disease; drug response; drug efficacy;
KW drug toxicity; primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9904038-A2.
XX
PD 28-JAN-1999.
XX
PF 17-JUL-1998; 98WO-IB001193.
XX
PR 18-JUL-1997; 97EP-00401740.
PR 21-APR-1998; 98US-0082614P.
XX
PA (GEST) GENSET.

XX Cohen D, Blumenfeld M, Tchoumakov I;
PI
XX WPI; 1999-132278/11.
XX
XX Production of biallelic markers - by obtaining a genomic DNA library,
PT determining the order and sequence of DNA fragments and identifying
PT nucleotides which vary between individuals.
XX
PS Example 8; Page 229; 280pp; English.

XX This invention describes a novel method for obtaining a set of biallelic
CC markers represented in AAX52533-X52632 and AAX52833-X52843 for use in
CC constructing a high density equilibrium map of the human genome. The
CC method involves (a) obtaining a nucleic acid library comprising genomic
CC DNA fragments comprising the full genome or a portion (b) determining the
CC order of genomic DNA fragments in the genome, (c) determining the
CC sequence of selected regions of the genomic DNA fragments and (d)
CC identifying nucleotides in the genomic DNA fragments which vary between
CC individuals, thereby defining a set of biallelic markers. The methods can
CC be used for identifying traits such as disease (e.g. Alzheimer's
CC disease), drug response, drug efficacy and drug toxicity. They can be
CC used for selecting an individual for inclusion in a clinical trial. The
CC method is used to map the position of genes in a genome (preferably the
CC human genome). The sequences described in AAX52633-X52832 and AAX52844-
CC X52868 represent primers used in the method of the invention

SQ Sequence 19 BP; 5 A; 2 C; 0 G; 12 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 9.4e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1604 ATATAAAATTATTAA 1620
Db 19 AAATAAAAGTTATTAA 3

RESULT 930
AAZ87039
ID AAZ87039 standard; DNA; 19 BP.
XX
AC AAZ87039;
XX
DT 16-MAY-2000 (first entry)

QY 1460 AGGAGGAGAGCCAGAA 1476
 DB 17 AGGAGGAGAGTAAGAA 1

RESULT 935
 AAZ72628/c
 ID AAZ72628 standard; DNA; 19 BP.
 XX
 AC AAZ72628;
 XX
 DT 10-SEP-2001 (first entry)
 XX
 DE Human biallelic marker upstream amplification primer SEQ ID NO:6984.
 XX
 KW Human genome; biallelic marker; high density disequilibrium map;
 KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
 KW haplotyping; hybridisation; identification; characterisation;
 KW amplification; single nucleotide polymorphism; SNP; PCR primer;
 KW diagnosis; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO9954500-A2.
 XX
 PD 28-OCT-1999.
 XX
 PF 21-APR-1999; 99WO-IB000822.
 XX
 PR 21-APR-1998; 98US-0082614P.
 PR 23-NOV-1998; 98US-0109732P.
 XX
 FA (GEST) GENSET.
 XX
 PI Cohen D, Blumenfeld M, Chumakov I;
 XX
 DR WPI; 2000-013267/01.
 XX
 PT Novel biallelic markers used to construct a high density disequilibrium
 map of the human genome.
 XX
 PS Claim 9; Page 1720; 2745pp; English.
 XX
 CC AAZ65654 to AAZ69578 represent human biallelic markers from the present
 CC invention, which contain a polymorphic base at position 24 of their
 CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
 CC primers for the biallelic markers. The biallelic markers of the invention
 CC have a variety of uses: they can be used for high density mapping of the
 CC human genome, and in complex association studies and haplotyping studies
 CC which are useful in determining the genetic basis for disease states.
 CC Compositions and methods of the invention can also be useful for the
 CC identification of the targets for the development of pharmaceutical
 CC agents and diagnostic methods, as well as the characterisation of the
 CC differential efficacious responses to and side effects from
 CC pharmaceutical agents acting on a disease as well as other treatment.
 CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
 CC 3367, are not actually given a sequence in the Sequence Listing from the
 CC present invention
 XX
 SQ Sequence 19 BP; 6 A; 8 C; 2 G; 3 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.8; DB 1; Length 19;
 Best Local Similarity 88.2%; Pred. No. 9.4e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 395 AGTTGCTCTACTGGTGGT 411
 DB 17 AGGTGCTCTACTGGTGGT 1

RESULT 936
 AAZ73399/c
 ID AAZ73399 standard; DNA; 19 BP.

XX
 AC AAZ73399;
 XX
 DT 10-SEP-2001 (first entry)
 XX
 DE Human biallelic marker upstream amplification primer SEQ ID NO:7755.
 XX
 KW Human genome; biallelic marker; high density disequilibrium map;
 KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
 KW haplotyping; hybridisation; identification; characterisation;
 KW amplification; single nucleotide polymorphism; SNP; PCR primer;
 KW diagnosis; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO9954500-A2.
 XX
 PD 28-OCT-1999.
 XX
 PF 21-APR-1999; 99WO-IB000822.
 XX
 PR 21-APR-1998; 98US-0082614P.
 PR 23-NOV-1998; 98US-0109732P.
 XX
 FA (GEST) GENSET.
 XX
 PI Cohen D, Blumenfeld M, Chumakov I;
 XX
 DR WPI; 2000-013267/01.
 XX
 PT Novel biallelic markers used to construct a high density disequilibrium
 map of the human genome.
 XX
 PS Claim 9; Page 1884; 2745pp; English.
 XX
 CC AAZ65654 to AAZ69578 represent human biallelic markers from the present
 CC invention, which contain a polymorphic base at position 24 of their
 CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
 CC primers for the biallelic markers. The biallelic markers of the invention
 CC have a variety of uses: they can be used for high density mapping of the
 CC human genome, and in complex association studies and haplotyping studies
 CC which are useful in determining the genetic basis for disease states.
 CC Compositions and methods of the invention can also be useful for the
 CC identification of the targets for the development of pharmaceutical
 CC agents and diagnostic methods, as well as the characterisation of the
 CC differential efficacious responses to and side effects from
 CC pharmaceutical agents acting on a disease as well as other treatment.
 CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
 CC 3367, are not actually given a sequence in the Sequence Listing from the
 CC present invention
 XX
 SQ Sequence 19 BP; 6 A; 3 C; 5 G; 5 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.8; DB 1; Length 19;
 Best Local Similarity 88.2%; Pred. No. 9.4e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1726 CTTTGAACCATTAAGGG 1742
 DB 19 CTTTGAACCATTAACGG 3

RESULT 937
 AAZ95082
 ID AAZ95082 standard; DNA; 19 BP.
 XX
 AC AAZ95082;
 XX
 DT 13-FEB-2002 (first entry)
 XX
 DE Human otoferlin exon PCR primer #47.
 XX
 KW Human; mouse; otoferlin; OTOF; brain; auditory function; PCR primer;

autosomal nonsyndromic prelingual deafness; DFNB9; ss.
Homo sapiens.
WO200170972-A2.
27-SEP-2001.
23-MAR-2001; 2001WO-IB000578.
24-MAR-2000; 2000US-0191738P.
(INSP) INST PASTEUR.
(CNRS) CNRS CENT NAT RECH SCI.
Yasunaga S, Grati M, Cohen-Salmon M, El Amraoui A, Petit C,
Weil D;
WPI; 2001-611499/70.
Novel human gene Otoferlin, underlying an autosomal recessive
nonsyndromic prelingual deafness, DFNB9, and proteins encoded by the
gene, implicated in deafness.
Claim 25; Page 17; 99pp; English.
The invention relates to a purified polynucleotide (I) encoding a protein
sequence (II) encoded by a novel human gene, otoferlin (OTOF) or the long
human otoferlin isoform in brain. (I) was identified as underlying an
autosomal nonsyndromic prelingual deafness DFNB9, and is thus useful for
detecting deafness disease in humans and for characterising the functions
of proteins and genes encoding them in auditory function. AAS95022-
AAS95248 represent human and mouse otoferlin coding sequences, PCR
primers and related sequences of the invention
Sequence 19 BP; 6 A; 1 C; 10 G; 2 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 9.4e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1337 AGGAGGGAGAGGGGGC 1353
Db |||||
3 AGGAGGGAGAGGAGAGC 19
RESULT 938
AAH58850
ID AAH58850 standard; DNA; 19 BP.
AC AAH58850;
DT 10-SEP-2001 (first entry)
DE Cdk-we-hu ribozyme binding site SEQ ID NO:1274.
KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulnery;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytotstatic;
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX Homo sapiens.
OS Synthetic.
FN WO200130362-A2.
XX 03-MAY-2001.
PD

26-OCT-2000; 2000WO-US029500.
26-OCT-1999; 99US-0161532P.
(IMMU-) IMMUSOL INC.
Robbins JM, Tritz R;
WPI; 2001-300427/31.
Treating proliferative skin or eye diseases and scarring, using ribozymes
that cleave RNA encoding cytokines involved in inflammation, matrix
metalloproteinases, growth factors and cell-cycle dependent kinases.
Example 1; Page 164; 408pp; English.
The present invention describes a method for treating a proliferative
skin or eye disease and scarring. The method involves administering a
ribozyme (I) which cleaves RNA encoding a cytokine involved in
inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
dependent kinase, growth factor or a reductase, or administering a
nucleic acid molecule (II) comprising a promoter operably linked to a
nucleic acid segment encoding (I). (I) can have antipsoriatic,
dermatological, cytotstatic, antiseborrheic, antidiabetic, antisickling,
ophthalmological, vulnery, keratolytic and virucide activities, and
cleaves RNA encoding cytokine involved in inflammation. (I) can be used
in gene therapy. (I) and (II) are useful for treating proliferative skin
diseases such as psoriasis, atopic dermatitis, actinic keratosis,
squamous or basal cell carcinoma and viral or seborrheic wart. They can
also be used for treating proliferative eye diseases such as diabetic
retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
prematurity and retinal detachment, and for treating and preventing
scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
scar. AAH57577 to AAH62099 represent sequences used in the
exemplification of the present invention
Sequence 19 BP; 3 A; 4 C; 4 G; 8 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 9.4e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1868 TTCAGGATCTCTGTT 1894
Db |||||
1 TTCAGGATCTCTCTTT 17
RESULT 939
AAH59467
ID AAH59467 standard; DNA; 19 BP.
AC AAH59467;
DT 10-SEP-2001 (first entry)
DE Cyclin D2 ribozyme binding site SEQ ID NO:1891.
KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulnery;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytotstatic;
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX Homo sapiens.
OS Synthetic.
FN WO200130362-A2.
XX

```

XX PD 03-MAY-2001.
XX PF
XX PR 26-OCT-2000; 2000WO-US029500.
XX PR 26-OCT-1999; 99US-0161532P.
XX PA (TMU-) IMMUSOL INC.
XX PI Robbins JM, Tritz R;
XX PN WPI; 2001-300427/31.
XX PD
XX PT Treating proliferative skin or eye diseases and scarring, using ribozymes
XX PT that cleave RNA encoding cytokines involved in inflammation, matrix
XX PT metalloproteinases, growth factors and cell-cycle dependent kinases.
XX PS
XX PS Example 1; Page 209; 408pp; English.
XX CC The present invention describes a method for treating a proliferative
XX CC skin or eye disease and scarring. The method involves administering a
XX CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
XX CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
XX CC dependent kinase, growth factor or a reductase, or administering a
XX CC nucleic acid molecule (II) comprising a promoter operably linked to a
XX CC nucleic acid segment encoding (I). (I) can have antipsoriatic,
XX CC dermatological, cytostatic, antiseborrheic, antidiabetic, antiscikling,
XX CC ophthalmological, vulnary, keratolytic and virucide activities, and
XX CC cleaves RNA encoding cytokine involved in inflammation. (II) can be used
XX CC in gene therapy. (I) and (II) are useful for treating proliferative skin
XX CC diseases such as psoriasis, atopic dermatitis, actinic keratosis,
XX CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
XX CC also be used for treating proliferative eye diseases such as diabetic
XX CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
XX CC prematurity and retinal detachment, and for treating and preventing
XX CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
XX CC scar. AAH57577 to AAH62099 represent sequences used in the
XX CC exemplification of the present invention
XX SQ Sequence 19 BP; 5 A; 8 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 19;
Best Local Similarity 88.2%; Pred. No. 9.4e+02;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 738 CTACCCGCTCCGAGACG 754
DB 1 CAACCTGCTCCGAGACG 17

RESULT 940
AAS15124
ID AAS15124 standard; DNA; 19 BP.
XX AC AAS15124;
XX DT 16-JAN-2002 (first entry)
XX DE
XX DE F HyBeacon probe for human CYP2C19, C19m1A.
XX KW Human; ss; CYP2C19; cytochrome P450; SNP; single nucleotide polymorphism;
XX KW hybridisation beacon; C19m1G; F HyBeacon probe; DNA-RNA hybrid.
XX OS Homo sapiens.
XX OS Synthetic.
XX PH Key Location/Qualifiers
XX FT modified_base 8 /tag= b
XX FT /mod_base= OTHER
XX FT /note= "U is covalently linked to a FAM fluorophore"
XX FT misc_RNA 8 /tag= a

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FT variation /label= RNA
FT replace(12,G)
FT /*tag= c
FT /label= SNP
FT /note= "Single nucleotide polymorphism"
FT modified_base 19
FT /*tag= d
FT /mod_base= OTHER
FT /note= "The 3' end of the probe is blocked with a
FT phosphate group"
XX XX
XX PN WO200173118-A2.
XX PD
XX PD 04-OCT-2001.
XX PF 28-MAR-2001; 2001WO-GB001430.
XX PR 29-MAR-2000; 2000GB-00007622.
XX PR 02-NOV-2000; 2000GB-00026749.
XX PA (LGCT-) LGC TEDDINGTON LTD.
XX PF French DJ, McDowell DG, Brown T;
XX WPI; 2001-616532/71.
XX PT A hybridization beacon which is a single stranded oligonucleotide labeled
XX PT with a fluorophore is useful to discriminate between polymorphic variants
XX PT of target oligonucleotides.
XX XX
XX XX Example; Page 27; 84pp; English.
XX CC The invention relates to a hybridisation beacon which is an
XX CC oligonucleotide having substantially no secondary structure, and formed
XX CC of nucleotides, one of which is labeled with a reporter, and no
XX CC associated quencher. The beacon is used to detect, identify or quantify a
XX CC target sequence in a sample, and to differentiate between homozygous and
XX CC heterozygous polymorphic targets. The present sequence is an F
XX CC HyBeacon probe targetting the a human gene for cytochrome P450, CYP2C19
XX CC which is known to contain several single nucleotide polymorphisms (SNP)
XX CC and is used to demonstrate the use of the hybridisation beacons of the
XX CC invention in detecting the SNPs
XX SQ Sequence 19 BP; 5 A; 6 C; 3 G; 4 T; 1 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 19;
Best Local Similarity 82.4%; Pred. No. 9.4e+02;
Matches 14; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

QY 670 GAGTACTTCCCGAGAAC 686
DB 1 GATTATTUCCCGAGAAC 17

RESULT 941
ABQ74039/c
ID ABQ74039 standard; DNA; 19 BP.
XX AC ABQ74039;
XX DT 11-OCT-2002 (first entry)
XX DE
XX DE SSO probe for HLA class II typing VII.
XX KW Homozygous stem cell; major histocompatibility complex; MHC; HLA;
XX KW human leukocyte antigen; immunotype; genotype; microsatellite; probe;
XX KW germ cell; neutrotic; neuroprotective; antiparkinsonian; vulnary;
XX KW cytostatic; antiarteriosclerotic; antiinflammatory; immunosuppressive;
XX KW antianaemic; antidiabetic; tranquiliser; respiratory; cardiant; trauma;
XX KW muscular; ophthalmological; gene therapy; genetic disease; cancer;
XX KW cystic fibrosis; muscular dystrophy; cardiac condition; burn; myopathy;
XX KW neurodegenerative disease; Alzheimer's disease; Parkinson's disease;
XX KW multiple sclerosis; post-trauma repair; reconstruction; blindness;

```


XX PD 29-NOV-2001.
 XX PF 21-NOV-2000; 2000WO-JP008181.
 XX PR 22-MAY-2000; 2000JP-00150648.
 XX PA (TANA/) TANABE T.
 XX PI Tanabe T, Katae T;
 XX DR WPI; 2002-083058/11.
 XX XX Medicinal compositions for inducing apoptosis in cells containing
 PT prostacyclin synthase gene as active ingredient, applicable in gene
 PT therapy for cancer, with screening method for apoptosis-inducing agents.
 XX PS Example 1; Page 26; 73pp; Japanese.
 XX CC The invention relates to drug compositions for inducing apoptosis in
 CC cells. The compositions contain the prostacyclin synthase gene as the
 CC active ingredient. They are useful in gene therapy for the treatment of
 CC cancer. The present sequence is provided in an example illustrating the
 CC invention
 XX SQ Sequence 19 BP; 0 A; 9 C; 0 G; 10 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.8; DB 1; Length 19;
 Best Local Similarity 88.2%; Pred. No. 9.4e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1422 AGAGGAGGAGGAGG 1438
 DB 18 AGAGGAGGAGGAGG 2
 RESULT 944
 ABX04673/c
 ID ABX04673 standard; DNA; 19 BP.
 AC ABX04673;
 XX 14-JAN-2003 (first entry)
 DT Human endogenous retrovirus k (herv-k) associated probe #45.
 DE Human; endogenous retrovirus; herv; prostate cancer; testicular cancer;
 KW multiple sclerosis; insulin-dependent diabetes mellitus; HML-2 protease;
 KW cancer; transgenic animal; probe; ss.
 XX Human endogenous retrovirus.
 OS WO200246477-A2.
 XX 13-JUN-2002.
 XX PD 07-DEC-2001; 2001WO-US04782A.
 XX PF 07-DEC-2000; 2000US-0251830P.
 XX PR 07-DEC-2001; 2001US-00016604.
 XX PA (CHIR) CHIRON CORP.
 XX PI Garcia P, Hardy SF, Williams LT, Escobedo J;
 XX DR WPI; 2002-691475/74.
 XX PT Novel isolated polypeptides useful for diagnosis of prostate cancer.
 XX PS Claim 18; Page 147; 152pp; English.
 XX CC The invention describes novel isolated polypeptides (I, Ib) useful for
 CC diagnosing prostate cancer comprising obtaining a patient sample

CC containing prostate cells and detecting the presence or absence of an
 CC expression product of a HML-2 endogenous retrovirus in a patient sample.
 CC polynucleotides associated with (I) are useful for diagnosis or treatment
 CC of testicular cancer, multiple sclerosis or insulin-dependent diabetes
 CC mellitus. An inhibitor of a HML-2 protease and a transdominant negative
 CC mutant of HML-2 cORF are also useful in the manufacture of a medicament
 CC for treating prostate cancer. (I) and (Ib) are useful for generating
 CC antibodies specific to the polypeptides associated with cancer, as
 CC targets for therapeutic intervention, and in immunising a transgenic
 CC animal. This sequence represents a probe used for detecting the presence
 CC of human endogenous retrovirus (herv) of the HML-2 sub-group in prostate
 CC tissue
 XX SQ Sequence 19 BP; 13 A; 0 C; 3 G; 3 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.8; DB 1; Length 19;
 Best Local Similarity 88.2%; Pred. No. 9.4e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1575 TTTTATATTTCTATTT 1591
 DB 17 TTTTCTATTTCTATCT 1
 RESULT 945
 ADE77590/c
 ID ADE77590 standard; DNA; 19 BP.
 AC ADE77590;
 XX 29-JAN-2004 (first entry)
 DT Human probe SSP24 used for a model HLA typing reaction.
 DE SSP24; probe; ss; human; single nucleotide polymorphism; SNP; CFTR;
 KW human leukocyte antigen; HLA; genetic testing; carrier screening;
 KW genotyping; profiling; polymorphic; multiplexed elongation assay;
 KW enzymatic recognition;
 KW cystic fibrosis conductance transmembrane regulator.
 XX Synthetic.
 OS Homo sapiens.
 XX Key Location/Qualifiers
 FT variation replace(19,g)
 FT /*tag= a
 FT /standard_name= "Single nucleotide polymorphism"
 XX WO2003034029-A2.
 XX PD 24-APR-2003.
 XX PF 15-OCT-2002; 2002WO-US033012.
 XX PR 15-OCT-2001; 2001US-0329427P.
 XX PR 15-OCT-2001; 2001US-0329428P.
 XX PR 15-OCT-2001; 2001US-0329619P.
 XX PR 15-OCT-2001; 2001US-0329620P.
 XX PR 14-MAR-2002; 2002US-0364416P.
 XX PA (BIOA-) BIOARRAY SOLUTIONS LTD.
 XX PI Li AX, Hashmi G, Seul M;
 XX DR WPI; 2003-393553/37.
 XX PT Concurrent interrogation of a number of polymorphic sites, useful for
 PT genetic testing, carrier screening, genetic profiling, and identity
 PT testing, comprises conducting a multiplexed elongation assay using
 PT probes.
 XX PS Example 6; Page 43; 143pp; English.
 XX

CC This invention relates to a novel method for the concurrent interrogation
 CC of a number of polymorphic sites in the presence of, and without
 CC interference from, non-designated polymorphic sites. Specifically, it
 CC comprises conducting a multiplexed elongation assay by applying one or
 CC more temperature cycles to achieve linear amplification of the target or
 CC a combination of annealing and elongation steps under temperature-
 CC controlled conditions. Furthermore, this detection method uses probe
 CC extension or elongation and relies on enzymatic recognition, a superior
 CC technique that no longer depends on differential hybridisation. The
 CC present invention describes probes and methods useful for identifying or
 CC detecting polymorphisms at one or more designated sites, such that they
 CC can identify mutations within the cystic fibrosis conductance
 CC transmembrane regulator (CFTR) or the human leukocyte antigen (HLA)
 CC genes. In addition, concurrent interrogation of a multiplicity of
 CC polymorphic sites is useful for genetic testing, carrier screening,
 CC genotyping or genetic profiling, and identity testing. This
 CC oligonucleotide is human probe SSP24, one member of a pair of probes
 CC containing a single nucleotide polymorphism at the 3' terminus that is
 CC used in a model HLA typing reaction, in an exemplification of the
 CC invention.

XX
 SQ Sequence 19 BP; 8 A; 4 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 19;
 Best Local Similarity 88.2%; Pred. No. 9.4e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1865 GTCTTCAGGATCTCCT 1881
 ||||| ||||| |||||
 Db 18 GTCTTCAGGATCTCCT 2

RESULT 946
 ADE77589/C
 ID ADE77589 standard; DNA; 19 BP.
 AC ADE77589;
 XX
 DT 29-JAN-2004 (first entry)
 XX
 DE Human probe SSP13 used for a model HLA typing reaction.
 XX
 KW SSP13; probe; ss; human; single nucleotide polymorphism; SNP; CFTR;
 KW human leukocyte antigen; HLA; genetic testing; carrier screening;
 KW genotyping; profiling; polymorphic; multiplexed elongation assay;
 KW enzymatic recognition;
 KW cystic fibrosis conductance transmembrane regulator.

OS Synthetic.
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT variation replace(19,a)
 FT /*tag= a
 FT /*standard_name= "Single nucleotide polymorphism"

XX
 PN WO2003034029-A2.
 XX
 PD 24-APR-2003.
 XX
 PF 15-OCT-2002; 2002WO-US033012.
 XX
 PR 15-OCT-2001; 2001US-0329427P.
 PR 15-OCT-2001; 2001US-0329428P.
 PR 15-OCT-2001; 2001US-0329619P.
 PR 15-OCT-2001; 2001US-0329620P.
 PR 14-MAR-2002; 2002US-0364416P.
 XX
 PA (BIOA-) BIOARRAY SOLUTIONS LTD.
 XX
 PA Li AX, Hashmi G, Seoul M;
 PI WPI; 2003-393553/37.

XX Concurrent interrogation of a number of polymorphic sites, useful for
 PT genetic testing, carrier screening, genetic profiling, and identity
 PT testing, comprises conducting a multiplexed elongation assay using
 XX probes.

XX Example 6; Page 43; 143pp; English.

XX This invention relates to a novel method for the concurrent interrogation
 CC of a number of polymorphic sites in the presence of, and without
 CC interference from, non-designated polymorphic sites. Specifically, it
 CC comprises conducting a multiplexed elongation assay by applying one or
 CC more temperature cycles to achieve linear amplification of the target or
 CC a combination of annealing and elongation steps under temperature-
 CC controlled conditions. Furthermore, this detection method uses probe
 CC extension or elongation and relies on enzymatic recognition, a superior
 CC technique that no longer depends on differential hybridisation. The
 CC present invention describes probes and methods useful for identifying or
 CC detecting polymorphisms at one or more designated sites, such that they
 CC can identify mutations within the cystic fibrosis conductance
 CC transmembrane regulator (CFTR) or the human leukocyte antigen (HLA)
 CC genes. In addition, concurrent interrogation of a multiplicity of
 CC polymorphic sites is useful for genetic testing, carrier screening,
 CC genotyping or genetic profiling, and identity testing. This
 CC oligonucleotide is human probe SSP13, one member of a pair of probes
 CC containing a single nucleotide polymorphism at the 3' terminus that is
 CC used in a model HLA typing reaction, in an exemplification of the
 CC invention.

XX Sequence 19 BP; 7 A; 4 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 19;
 Best Local Similarity 88.2%; Pred. No. 9.4e+02;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1865 GTCTTCAGGATCTCCT 1881
 ||||| ||||| |||||
 Db 18 GTCTTCAGGATCTCCT 2

RESULT 947
 ADE43564
 ID ADE43564 standard; DNA; 19 BP.
 AC ADE43564;
 XX
 DT 29-JAN-2004 (first entry)
 XX
 DE Human IDE sequencing primer, SEQ ID 169.
 XX
 KW Neurodegenerative disease; uPA; SNCG; IDE; KNSL1; LIPA; TNFRSF6;
 KW Alzheimer's disease; neuroprotective; nootropic; gene therapy;
 KW Chromosome 10; PCR; primer; ss.

OS Homo sapiens.
 XX
 PN WO2003054143-A2.
 XX
 PD 03-JUL-2003.
 XX
 PF 25-OCT-2002; 2002WO-US034679.
 XX
 PR 25-OCT-2001; 2001US-0339525P.
 PR 08-NOV-2001; 2001US-0336929P.
 PR 08-NOV-2001; 2001US-0338010P.
 PR 09-NOV-2001; 2001US-0338363P.
 PR 04-DEC-2001; 2001US-0337052P.
 PR 28-MAR-2002; 2002US-0368919P.
 XX
 PA (NEUR-) NEUROGENETICS INC.
 PA (GEO) GEN HOSPITAL CORP.

XX Becker KD, Velicelebi G, Elliott KJ, Wang X, Tanzi RE, Bertram L;

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PI Saunders AJ, Mullin KM, Sampson AJ, Blacker DL;
XX
XX WPI; 2003-559131/52.
XX
XX Determining a predisposition for or the occurrence of neurodegenerative
XX disease, e.g. Alzheimer's disease by detecting in a target nucleic acid
XX the presence or absence of an allelic variant of one or more polymorphic
XX regions.
XX
XX Example 3; Page 276; 848pp; English.
XX
XX The present invention relates to a method (M1) for determining a
XX predisposition for or the occurrence of neurodegenerative disease in a
XX subject. The method comprises detecting in a target nucleic acid obtained
XX from the subject the presence or absence of an allelic variant of one or
XX more polymorphic regions of one or more genes selected from uPA
XX (urokinase plasminogen activator), SNGF (gamma-synuclein), IDE (insulin-
XX degrading enzyme), KNSL1 (Kinesin-like protein 1), LIPA (lysosomal acid
XX lyase), and TNFRSF6 (Tumour Necrosis Factor Receptor-SF6), where the
XX presence of at least one of the allelic variant of one or more
XX polymorphic regions is indicative of a predisposition for or the
XX occurrence of neurodegenerative disease. The genes are all located on
XX chromosome 10. M1 is useful for determining a predisposition for or the
XX occurrence of, and for treating neurodegenerative disease, particularly
XX Alzheimer's disease. The present sequence is a PCR primer, which was used
XX in the method of the invention.
XX
XX Sequence 19 BP; 4 A; 6 C; 3 G; 6 T; 0 U; 0 Other;
SQ

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DR WPI; 1993-320768/40.
XX
XX Oligo-nucleotide(s) able to be hybridised with nucleic acids encoding PKC
XX - useful as diagnostics and therapeutics for disease states associated
XX with particular isozymes of protein Kinase C.
XX
XX Claim 6; Page 20; 64pp; English.
XX
XX The sequences given in AAQ49657-707 are antisense oligonucleotides which
XX contain altered inter-sugar linkages, pref. phosphorothionate linkages.
XX These oligomers bind with the protein kinase C (PKC) mRNA at the
XX transcription initiation site, the translation initiation site, the 5'
XX cap region, an intron/exon boundary, coding sequences or sequences in the
XX 5' or 3'-untranslated regions. These oligonucleotides may be used in
XX diagnostics, therapeutics, prophylaxis and as research reagents. The
XX numbers allocated to the oligonucleotides are relative to the first
XX residue to be sequenced on the cDNA, which is 28 residues upstream of the
XX ATG start codon. (Updated on 25-MAR-2003 to correct PN field.)
XX
XX Sequence 20 BP; 4 A; 3 C; 9 G; 4 T; 0 U; 0 Other;
SQ

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Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
Qy 946 ATGCTGATGCTGGGAGG 962
Db 1 AGGCTGATGCTGGGAG 17

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RESULT 949
AAQ53924
ID AAQ53924 standard; DNA; 20 BP.
XX
XX AAQ53924;
XX
XX 25-MAR-2003 (revised)
XX 21-JUN-1994 (first entry)
XX
XX TYR 2 PCR primer for amplifying TYR locus used in detection method.
XX
XX PCR; polymerase chain reaction; detection; amplification; ASPE;
XX allele specific primer extension; discrimination; ss.
XX
XX Synthetic.
XX
XX WO9325563-A1.
XX
XX 23-DEC-1993.
XX
XX 17-JUN-1992; 92WO-US005133.
XX
XX 17-JUN-1992; 92WO-US005133.
XX
XX (CITY) CITY OF HOPE.
XX
XX Wallace RB;
XX
XX WPI; 1994-007441/01.
XX
XX New primer for detecting specific target nucleic acid in sample - has 3'
XX end complementary to target which is adjacent to nucleotide and 5' end
XX complementary to preselected sequence.
XX
XX Example 2; Page 11; 40pp; English.
XX
XX Two primers TYR 1 and 2 (AAQ53923-24) were used to amplify the TYR locus
XX for use as a template. An allele specific primer (AAQ53925) was then used
XX to amplify the template molecule, the first base incorporated into the
XX extension products being radioactively labelled. Individuals homozygous
XX for the TYR allele gave one extension product and those heterozygous for
XX the allele gave two extension products. The extension products were
XX captured on a grid by hybridisation with one synthetic oligonucleotide to
XX

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SQ Sequence 20 BP; 6 A; 3 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 775 GAGGCCATTTCAGCC 791
||| ||||| ||||| |||||
DB 20 GAGTCATTTCAGCC 4

RESULT 952

AAT26519
ID AAT26519 standard; cDNA to mRNA; 20 BP.

XX AC AAT26519;

XX DT 24-OCT-1996 (first entry)

XX DE Human gene signature HUMGS08761.

XX KW Gene signature; messenger RNA; mRNA; relative abundance; frequency;
XX KW human; cloning; mapping; non-biased library; diagnosis; detection;
XX KW cell typing; abnormal cell function; ss.

XX OS Homo sapiens.

XX FN W09514772-A1.

XX PD 01-JUN-1995.

XX PF 11-NOV-1994; 94WO-JP001916.

XX PR 12-NOV-1993; 93JP-00355504.

XX PA (MATS/) MATSUBARA K.

XX PA (OKUB/) OKUBO K.

XX PI Matsubara K, Okubo K;

XX WPI; 1995-206931/27.

PT Single-stranded DNA for identifying gene signatures - isolated from 3'-
PT directed human cDNA library that reflects relative abundance of corresp.
PT mRNA in specific human tissues.

PS Claim 1; Page 2106; 2245pp; Japanese.

XX A single-stranded DNA (or its complementary strand or the corresp. double
XX -stranded DNA) which comprises one of the 7837 "GS" sequences given in
XX AAT19001-T26837 and which is able to hybridise to part of human genomic
XX DNA, cDNA or mRNA is claimed. The GS (Gene Signature) sequences were
XX obtained from 3'-directed cDNA libraries prepared from various human
XX tissues; synthesis of cDNA was initiated from the 3'-end of mRNA by using
XX poly(T) as the sole primer. Since the 3'- untranslated sequence is unique
XX to a particular mRNA species, almost all the 3'-oriented cDNAs hybridise
XX with specific mRNAs. Each library is constructed so as to reflect
XX accurately the relative abundance of different mRNAs in the particular
XX tissue from which it was derived. The appearance frequency of a given GS
XX in a cDNA library can be determined (esp. using primers and probes
XX derived from the GS sequences) as a means of diagnosing abnormal cell
XX function or for recognising different cell types

SQ Sequence 20 BP; 7 A; 4 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 540 CATCTGGGAACTGCTAA 556
||| ||||| ||||| |||||
DB 4 CATCTGGGAACTGCTAA 20

RESULT 953

AAX59720/C
ID AAX59720 standard; DNA; 20 BP.

XX AC AAX59720;

XX DT 22-JUL-1999 (first entry)

XX DE Modified oligonucleotide containing N3'-P5' phosphoramidates.

XX KW Oligodeoxyribonucleotide; intersubunit linkage;
XX KW phosphoramidate intersubunit; antisense activity; nuclease resistant;
XX KW in-vitro cell growth inhibition assay; infection;
XX KW smooth muscle cell proliferation disorder; inflammatory process;
XX KW genetic disorder; cancer; ss.

XX OS Synthetic.

XX FN Key Location/Qualifiers

XX PT modified_base 1..8

XX FT /*tag= a
XX FT /note= "each base is linked by N3'-P5' phosphoramidate
XX FT linkages"

XX PN W09525814-A1.

XX PD 28-SEP-1995.

XX PF 20-MAR-1995; 95WO-US003575.

XX PR 18-MAR-1994; 94US-00210505.

XX PR 18-MAR-1994; 94US-00214599.

XX PA (LYNX-) LYNX THERAPEUTICS INC.

XX PI Gryaznov SM, Schultz RG, Chen J;

XX WPI; 1995-344627/44.

XX Oligo:nucleotide N3'-P5' phosphoramidate(s) - have improved resistance
XX toward phosphodiesterase digestion, and form stable duplexes with DNA and
XX RNA strands.

PS Disclosure; Page 55; 101pp; English.

XX The specification describes oligodeoxyribonucleotides having contiguous
XX nucleoside subunits joined by intersubunit linkages, where at least 3
XX contiguous subunits are joined by phosphoramidate intersubunits. The
XX oligodeoxyribonucleotides has a sequence of nucleoside subunits effective
XX to form a duplex with a target nucleic acid molecule. The
XX oligodeoxyribonucleotides are more resistant to nuclease digestion and
XX have improved RNA and dsDNA hybridisation characteristics, relative to
XX oligonucleotides not containing N3'-P5' phosphoramidate linkages. They
XX also have excellent antisense activity against complementary mRNA targets
XX in in-vitro cell growth inhibition assays. They also exhibit low
XX cytotoxicity. They may be used in diagnostic and therapeutic
XX applications, e.g., in combating infections agents such as bacteria,
XX viruses, etc. or in treatment of smooth muscle cell proliferation
XX disorders, inflammatory processes, certain genetic disorders, cancers,
XX etc. . The present sequence represents an oligonucleotide of the invention

SQ Sequence 20 BP; 8 A; 0 C; 0 G; 12 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 20;

Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1601 TTTATATAAAATTTAT 1617
||| ||||| ||||| |||||

DB 20 TATATATAAAATATAT 4

OS Synthetic.
 XX JF08092289-A.
 XX
 XX 09-APR-1996.
 XX
 XX 21-SEP-1994; 94JP-00251600.
 XX
 XX 21-SEP-1994; 94JP-00251600.
 XX
 XX (ONOF) ONO PHARM CO LTD.
 XX
 XX WPI; 1996-236099/24.
 XX
 XX Human Machado-Joseph disease-related protein and DNA encoding it - used
 PT in the diagnosis and treatment of MJD.
 XX
 XX Claim 16; Page 7; 12pp; Japanese.
 XX
 XX The primers AAT27157-9 were used to amplify the nucleotide sequence of a
 CC human Machado-Joseph disease-related gene (AAT27151) or fragments. The
 CC gene was isolated from a human cerebral temporal fossa lobe cortex mRNA-
 CC derived cDNA library using the probe AAT27160. 8 highly positive clones
 CC were isolated including the clone CAG-27 (AAT26151). The BamHI-BglII and
 CC DraII-SacI fragments of this clone were then used to isolate other clones
 CC (sequences not in specification). The clones or fragments can be used in
 CC the diagnosis and treatment of Machado-Joseph disease
 XX
 XX Sequence 20 BP; 4 A; 5 C; 4 G; 7 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 13.8; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 1e+03; Indels 0; Gaps 0;
 Matches 15; Conservative 0; Mismatches 2;
 XX
 QY 1053 CAATGACTACTTGAAT 1069
 |||||
 DB 2 CAGTGACTACTTGAAT 18
 |||||
 RESULT 957
 AAV01340/C
 ID AAV01340 standard; DNA; 20 BP.
 XX
 AC AAV01340;
 XX
 XX 23-MAR-1998 (first entry)
 XX
 DE Glucokinase PCR primer for universal mammalian STS's.
 XX
 XX PCR primer; polymerase chain reaction; amplification; UM-STS;
 KW universal mammalian sequence tagged site; genomic map; clone; ss.
 XX
 XX Synthetic.
 OS
 XX WO9731012-A1.
 FN
 XX 28-AUG-1997.
 PD
 XX 18-FEB-1997; 97WO-US002403.
 PF
 XX 22-FEB-1996; 96US-0012061P.
 PR
 XX (UNMI) UNIV MICHIGAN.
 PA (UNMS) UNIV MICHIGAN STATE.
 XX
 XX Brewer GJ, Venta PJ, Yuzbasiyan-Gurkan V;
 PI WPI; 1997-435083/40.
 XX
 XX New oligonucleotide primers amplifying gene regions conserved among
 PT mammals - useful for developing genomic maps, isolating clones and making
 PT cross-species comparisons.
 PT

PS Claim 2; Page 13; 26pp; English.
 XX
 CC The present sequence represents a specifically claimed oligonucleotide
 CC PCR primer. The oligonucleotide can be used for polymerase chain reaction
 CC (PCR) amplification of DNA, specifically regions of specific genes that
 CC are conserved among mammalian species, i.e. pairs of oligonucleotides
 CC from the present specification represent universal mammalian sequence-
 CC tagged site (UM-STS) primers. The primers are used to develop genomic
 CC maps, to isolate clones from libraries, to make cross-species comparisons
 CC and to develop additional genetic markers. UM-STS allow genomic
 CC comparisons to be made between more species
 XX
 XX Sequence 20 BP; 2 A; 5 C; 8 G; 5 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 13.8; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 1e+03; Indels 0; Gaps 0;
 Matches 15; Conservative 0; Mismatches 2;
 XX
 QY 1213 ATTCCTGAGGAGCCCAT 1229
 |||||
 DB 20 ATCCCCGAGGAGCCCAT 4
 |||||
 RESULT 958
 AAV01329
 ID AAV01329 standard; DNA; 20 BP.
 XX
 AC AAV01329;
 XX
 XX 23-MAR-1998 (first entry)
 DT
 XX CGMP-regulated channel PCR primer for universal mammalian STS's.
 DE
 XX PCR primer; polymerase chain reaction; amplification; UM-STS;
 KW universal mammalian sequence tagged site; genomic map; clone; ss.
 XX
 XX Synthetic.
 OS
 XX WO9731012-A1.
 FN
 XX 28-AUG-1997.
 PD
 XX 18-FEB-1997; 97WO-US002403.
 PF
 XX 22-FEB-1996; 96US-0012061P.
 PR
 XX (UNMI) UNIV MICHIGAN.
 PA (UNMS) UNIV MICHIGAN STATE.
 XX
 XX Brewer GJ, Venta PJ, Yuzbasiyan-Gurkan V;
 PI WPI; 1997-435083/40.
 XX
 XX New oligonucleotide primers amplifying gene regions conserved among
 PT mammals - useful for developing genomic maps, isolating clones and making
 PT cross-species comparisons.
 PT
 PS Claim 2; Page 13; 26pp; English.
 XX
 CC The present sequence represents a specifically claimed oligonucleotide
 CC PCR primer. The oligonucleotide can be used for polymerase chain reaction
 CC (PCR) amplification of DNA, specifically regions of specific genes that
 CC are conserved among mammalian species, i.e. pairs of oligonucleotides
 CC from the present specification represent universal mammalian sequence-
 CC tagged site (UM-STS) primers. The primers are used to develop genomic
 CC maps, to isolate clones from libraries, to make cross-species comparisons
 CC and to develop additional genetic markers. UM-STS allow genomic
 CC comparisons to be made between more species
 XX
 XX Sequence 20 BP; 12 A; 3 C; 5 G; 0 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 13.8; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 1e+03;
 PT

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1417 GACCCAGAGGAGAGAA 1433
|||||
Db 1 GACCCAGAGGAGAGAAA 17
|||||

RESULT 959
AAT86830
ID AAT86830 standard; DNA; 20 BP.
XX
AC AAT86830;
XX
DT 19-DEC-1997 (first entry)
XX
DE Probe for wild type MTND6 RNA.
XX
KW probe; detecting; dystonia; Leber's hereditary optic neuropathy; LHON;
KW predisposition; mutation; mitochondrial DNA; diagnosis; ss.
XX
OS Synthetic.
OS
PN US5670320-A.
XX
XX 23-SEP-1997.
PD
XX
PF 14-NOV-1994; 94US-00339912.
XX
XX 14-NOV-1994; 94US-00339912.
PR
XX (UYEM-) UNIV EMORY.
PA
XX Wallace DC, Brown MD;
PI
XX WPI; 1997-479449/44.
DR
XX Detection of dystonia and Leber's hereditary optic neuropathy - by
PT detecting in a sample from the subject a mutation at position 14459 of
PT mitochondrial DNA.
XX
PS Disclosure; Col 27; 16pp; English.
XX

AAT86830 is a probe used for detecting a wild type MTND6 sequence. A
CC mutation in the MTND6 sequence at nucleotide 14459 is associated with a
CC class of dystonia and/or Leber's hereditary optic neuropathy (LHON).
CC Specific oligonucleotides can be used to diagnosis dystonia or LHON.
CC predisposition to such a condition, comprising detecting in a sample from
CC the subject the presence of a mutation at position 14459 of mitochondrial
CC DNA, the presence of the mutation indicating the class of dystonia and/or
CC LHON in the subject. The methods provide a predictive and/or diagnostic
CC assay for LHON and dystonia as well as therapeutic treatments and models
CC for screening drugs for usefulness in treatment of LHON and/or dystonia
XX

SQ Sequence 20 BP; 7 A; 4 C; 4 G; 5 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 262 TACACAGCGATGACTA 278
|||||
Db 4 TACTACAGCGATGGCTA 20
|||||

RESULT 960
AAT94038/c
ID AAT94038 standard; cDNA; 20 BP.
XX
AC AAT94038;
XX
XX 25-MAR-2003 (revised)
DT 01-APR-1998 (first entry)
XX

DE Forward PCR primer used to amplify a 241 bp fragment of cMOAT cDNA.
XX
KW Canalicular multispecific organic anion transporter protein;
KW cMOAT protein; ATP-binding cassette transporter family; ABC transporter;
KW hepatobiliary excretion; multidrug resistance-associated protein;
KW cMOAT protein activity; multidrug resistance-related protein; MDR-1;
KW Dubin-Johnson disease; Rotor disease; PCR primer; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9731111-A2.
XX
PD 28-AUG-1997.
XX
PF 21-FEB-1997; 97WO-NL000079.
XX
PR 22-FEB-1996; 96EP-00200460.
XX
PA (INTR-) INTROGENE BV.
PA (MEDI-) ACAD MEDISCH CENT AMSTERDAM.
PA (HETN-) HET NEDERLANDS KANKER INST.
XX
XX Oude Elferink RPJ, Paulusma CC, Bosma PJ, Borst P, Evers R;
PI Kool M;
PI WPI; 1997-435163/40.
XX
DR DNA encoding human and rat canalicular multispecific organic anion
PT transporter proteins - useful for diagnosis and treatment of Dubin-
PT Johnson disease and Rotor disease.
XX
PS Example 6; Page 29; 106pp; English.
XX

PCR primers AAT94038-39 were used to amplify a 241 bpo fragment of
CC canalicular multispecific organic anion transporter (cMOAT) protein cDNA.
CC The PCR product was cloned, and subsequently used in a RNase protection
CC assay. cMOAT is a new member of the ATP-binding cassette (ABC)
CC transporter family. The ATP dependent cMOAT transporter system mediates
CC hepatobiliary excretion in the liver. cMOAT may be a liver-specific
CC homologue of multidrug resistance-associated protein. The nucleic acids
CC are used to provide cells with cMOAT protein activity. cMOAT protein
CC activity in cells can be enhanced by increasing the level of glutathione,
CC glucuronide and/or sulphate. Antisense constructs, especially derived
CC from another multidrug resistance (MDR)-related protein, e.g. MDR-1, to
CC the nucleic acids and vectors can be used to decrease the level of cMOAT
CC in a cell. The nucleic acids and proteins can be used especially in
CC diagnosis of Dubin-Johnson disease, Rotor disease or another disease
CC involving cMOAT. The cMOAT gene may also be used as a selectable marker
CC gene. (Updated on 25-MAR-2003 to correct PI field.)
XX

SQ Sequence 20 BP; 4 A; 6 C; 3 G; 7 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1323 CTCGATTCTGAAGAGG 1339
|||||
Db 20 CTAGATTCTGAAGAGG 4
|||||

RESULT 961
AAV68469
ID AAV68469 standard; DNA; 20 BP.
XX
AC AAV68469;
XX
XX 22-MAR-1999 (first entry)
DT
XX
DE Oligo contained activator-antisense complex spA4-anti-(M3)hTR.
XX
KW Human; telomerase; hTR; activator-antisense complex; malignant; enzyme;

KW cleave; brain; tumour malignant glioma; breast tumour; renal cell cancer;
 KW melanoma; prostate cancer; leukemia; polychemia vera; myeloma; sarcoma;
 KW Hodgkin's lymphoma; Waldenstrom's macroglobulinemia; heavy chain disease;
 KW carcinoma; chemotherapeutic; antisense; ss.

XX Synthetic.
 OS Homo sapiens.

XX Key Location/Qualifiers
 FH modified_base 1 /*tag= a
 FT /note= "Sp5'A(2'p5'A)3-Bu2"
 FT misc_feature 19..20
 FT /*tag= b
 FT /note= "3'-3' internucleotide linkage"
 FT misc_feature 20
 FT /*tag= c
 FT /note= "nucleotide in reverse orientation 3'-5'"

XX WC9847911-A1.

XX 29-OCT-1998.

XX 13-APR-1998; 98WO-US007397.

XX 21-APR-1997; 97US-0044507P.

XX 03-FEB-1998; 98US-00018125.

XX (CLEV-) CLEVELAND CLINTC FOUND.

XX (USSH) US NAT INST OF HEALTH.

XX Silverman RH, Kondo S, Cowell JK, Li G, Torrence PF;

XX WPI; 1998-609972/51.

XX New RNase L activator-telomerase antisense complex - useful to inhibit
 PT telomerase activity in telomerase-expressing malignancies.

XX Example; Page 45; 81pp; English.

CC This represents an antisense oligonucleotide to the RNA component of
 CC human telomerase (hTR) comprised in the. The invention relates to an
 CC activator-antisense complex that comprises: (a) an antisense oligo,
 CC complementary to a 12-25 nucleotide portion of the RNA component of hTR,
 CC with a hydroxyl moiety at the first end; and (b) a linker attached to the
 CC first end, and (c) an activator of RNase L attached to the linker. The
 CC activator-antisense complex may be used for inhibiting the growth of a
 CC telomerase-expressing malignant cell or tumour. The complex is used to
 CC specifically cleave the ribonucleotide portion of a telomerase enzyme.
 CC The complex inhibits growth of telomerase expressing malignant cells from
 CC brain tumour malignant glioma, breast tumour, renal cell cancer,
 CC melanoma, and prostate cancer. Many other malignancies and related
 CC disorders may be treated including various acute and chronic leukemias,
 CC polychemia vera, Hodgkin's and non-Hodgkin's lymphomas, multiple
 CC myeloma, Waldenstrom's macroglobulinemia, heavy chain disease, and solid
 CC tumours, including numerous sarcomas and carcinomas. The complex is
 CC preferably administered in combination with a chemotherapeutic agent,
 CC particularly either cisplatin, doxorubicin, mitomycin, daunorubicin,
 CC bleomycin, actinomycin D, or neocarzinostatin. The present sequence is an
 CC example of a modified antisense oligo comprised in an activator-antisense
 CC complex spA4-anti-(M3)hTR

XX Sequence 20 BP; 4 A; 6 C; 7 G; 3 T; 0 U; 0 Other;

XX Query Match 0.7%; Score 13.8; DB 1; Length 20;
 XX Best Local Similarity 88.2%; Pred. No. le+03;
 XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1192 CCTGGGGTCCAAATGCA 1208

DB 2 CCCGGGGTGCAATGCA 18

RESULT 962
 AAV59108/c

ID AAV59108 standard; cDNA; 20 BP.

XX AC AAV59108;

XX DT 20-NOV-1998 (first entry)

XX Bovine differentiation enhancing factor primer 2.

XX ss; Bovine; differentiation enhancing factor; ankryrin repeat; PCR;
 KW C2 domain; SH3 consensus binding sequence; pleckstrin homology domain;
 KW adipogenesis; neurogenesis; hyperplastic disease; neoplastic disease;
 KW nervous system; primer; amplification.

XX Bos sp.

XX Key Location/Qualifiers
 FH misc_feature 6
 FT /*tag= a
 FT /label= i

XX WC9836065-A1.

XX 20-AUG-1998.

XX 13-FEB-1998; 98WO-US002724.

XX 14-FEB-1997; 97US-0038191P.

XX (DAND) DANA FARBER CANCER INST INC.

XX Thomas RM, King FJ, Harris DF, Hu E, Spiegelman B, Chan J;

XX WPI; 1998-467173/40.

XX New nucleic acid encoding differentiation enhancing factor - used
 PT particularly to regulate adipogenesis and neurogenesis, e.g. for treating
 PT tumours and neurological disease.

XX Example 2; Page 89; 203pp; English.

CC The primers AAV59107-V59109 were used in the cloning of bovine
 CC differentiation enhancing factors (DEF). DEF comprise at least one each
 CC of SH3 consensus binding sequence, ankryrin repeat, pleckstrin homology
 CC domain and C2 domain. The DEF induce adipogenesis or neurogenesis; they
 CC are mediators of SH3-domain dependent signalling and may be involved in
 CC cellular gene expression, cytoskeletal architecture, protein trafficking,
 CC endocytosis or adhesion, migration, proliferation and differentiation of
 CC cells. Typical applications of DEF and agents that modulate interaction
 CC between the protein and it's ligand, or of nucleic acid expressing them,
 CC are treatment of hyperplastic and neoplastic disease (a wide range of
 CC solid tumours and leukaemias), including metastases; for in vitro
 CC induction of differentiation of neural crest cells to neurons, glial
 CC cells etc.; for increasing neuron survival, and inducing cell repair, in
 CC the nervous system (e.g. treatment of traumatic injury, stroke,
 CC Alzheimer's, Parkinson's or Huntington's diseases, amyotrophic lateral
 CC sclerosis, multiple sclerosis etc.)

XX Sequence 20 BP; 8 A; 2 C; 3 G; 1 T; 0 U; 6 Other;

XX Query Match 0.7%; Score 13.8; DB 1; Length 20;
 XX Best Local Similarity 60.0%; Pred. No. le+03;
 XX Matches 12; Conservative 5; Mismatches 3; Indels 0; Gaps 0;

QY 1993 TTCTCCTAATTCGACGTG 2012

DB 20 TTTCTCTCTTTGTGNACRTG 1

RESULT 963

RAV35550

ID AAV35550 standard; DNA; 20 BP.

PA (ISIS-) ISIS PHARM INC.
 XX Dean N, Bennett CF;
 XX WPI; 1999-228583/19.
 DR
 XX New human protein kinase C antisense oligonucleotides - useful for
 PT treating PKC-related hyperproliferative conditions e.g. cancer and
 PT psoriasis.
 XX
 XX Example 4; Col 15-16; 55pp; English.
 XX This invention describes antisense oligonucleotides that specifically
 CC bind to human protein kinase C (PKC) mRNA. These oligonucleotides can be
 CC used to inhibit PKC mRNA and therefore be used to treat PKC-related
 CC hyperproliferative conditions, e.g. cancer, especially colorectal cancer,
 CC breast cancer, bladder cancer, lung cancer, or brain cancer (preferably
 CC glioblastoma multiforme). The products of the invention may also be used
 CC to treat skin cancer and psoriasis.
 XX
 XX Sequence 20 BP; 4 A; 3 C; 9 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 13.8; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 1e+03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 946 ATGCTGATGCTGGGAGG 962
 DB 1 AGGCTGATGCTGGGAGG 17
 RESULT 966
 AAX22623
 ID AAX22623 standard; DNA; 20 BP.
 XX AC AAX22623;
 XX
 DT 27-MAY-1999 (first entry)
 XX
 DE Human protein kinase C antisense oligonucleotide #62.
 KW protein kinase C; PKC; human; antisense; primer; inhibitor; treatment;
 KW hyperproliferative condition; cancer; colorectal; breast; bladder; lung;
 KW brain; glioblastoma multiforme; skin; psoriasis; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 XX US5985970-A.
 XX
 PD 23-MAR-1999.
 XX
 XX 07-JUN-1995; 95US-00488177.
 XX
 XX 16-MAR-1992; 92US-00852852.
 PR
 PR 09-JUL-1993; 93US-00089996.
 XX
 XX (ISIS-) ISIS PHARM INC.
 PA
 XX Dean N, Bennett CF;
 XX WPI; 1999-228583/19.
 DR
 XX New human protein kinase C antisense oligonucleotides - useful for
 PT treating PKC-related hyperproliferative conditions e.g. cancer and
 PT psoriasis.
 XX
 XX Example 14; Col 20; 55pp; English.
 XX This invention describes antisense oligonucleotides that specifically
 CC bind to human protein kinase C (PKC) mRNA. These oligonucleotides can be
 CC used to inhibit PKC mRNA and therefore be used to treat PKC-related
 CC hyperproliferative conditions, e.g. cancer, especially colorectal cancer,

CC breast cancer, bladder cancer, lung cancer, or brain cancer (preferably
 CC glioblastoma multiforme). The products of the invention may also be used
 CC to treat skin cancer and psoriasis
 XX
 SQ Sequence 20 BP; 5 A; 2 C; 9 G; 4 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.8; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 1e+03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 946 ATGCTGATGCTGGGAGG 962
 DB 2 AGGCTGATGCTGGGAGG 18
 RESULT 967
 AAX15776/C
 ID AAX15776 standard; cDNA to mRNA; 20 BP.
 XX AC AAX15776;
 XX
 DT 07-MAY-1999 (first entry)
 XX
 DE Antisense oligonucleotide targeted to upstream sequence of VEGF.
 XX
 XX Vascular endothelial cell growth factor; VEGF; antisense oligonucleotide;
 KW solid tumor growth; anticancer agent; rheumatic arthritis;
 KW diabetic retinitis; ss.
 XX
 OS Synthetic.
 OS
 XX JP11042091-A.
 XX
 PD 16-FEB-1999.
 XX
 PF 25-JUL-1997; 97JP-00213838.
 XX
 PR 25-JUL-1997; 97JP-00213838.
 XX
 PA (TOAG) TOA GOSEI CHEM IND LTD.
 XX
 DR WPI; 1999-197823/17.
 XX
 PT An antisense nucleic acid compound against vascular endothelial cell
 PT growth factor (VEGF) - useful as an anticancer agent, and for treatment
 PT of rheumatic arthritis and diabetic retinitis.
 XX
 PS Example 1; Page 7; 16pp; English.
 XX
 CC AAX15764-81 represent antisense oligonucleotides targeted to the upstream
 CC sequence of the coding region for vascular endothelial cell growth factor
 CC (VEGF). Antisense oligonucleotides targeted to this region inhibit at
 CC least 50 % of VEGF expression by the cell. The antisense oligonucleotides
 CC can inhibit the growth of solid tumor and are useful as anticancer agents
 CC and for treating rheumatic arthritis and diabetic retinitis
 XX
 SQ Sequence 20 BP; 0 A; 11 C; 0 G; 9 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.8; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 1e+03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1399 GAGGATGAAAAGAGAA 1415
 DB 17 GAGGAGGAAGAAGAGAA 1
 RESULT 968
 AAX15609
 ID AAX15609 standard; cDNA to mRNA; 20 BP.
 XX AC AAX15609;
 XX

CC This invention describes novel oligonucleotides (AAx78524-X78644) having
 CC up to 50 nucleotides hybridizable with, and able to modulate the
 CC expression of, a nucleic acid encoding protein kinase C and its isoforms
 CC alpha, beta type I, beta type II, gamma, eta, delta, epsilon and zeta.
 CC The oligonucleotides of the invention have anti-inflammatory and
 CC cytotatic activity and are used for antisense targeting to modulate the
 CC expression of PKC or of a particular PKC isozyme or set of isozymes in
 CC cells or tissues. The products of the invention also hybridize with
 CC nucleic acids involved in the modulation of PKC expression, which is
 CC known to be involved growth control in hyperproliferative diseases e.g.
 CC colon cancer, glioblastoma and bladder cancer as well as in inflammatory
 CC conditions e.g. psoriasis. Due to their specificity the oligonucleotides
 CC are able to overcome the problems of toxicity associated with previous
 CC agents designed to modulate PKC expression
 XX
 SQ Sequence 20 BP; 5 A; 2 C; 9 G; 4 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.8; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 1e+03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 946 ATGCTGATGCTGGGAGG 962
 | | | | | | | | | |
 Db 2 AGGCTGATGCTGGGAGG 18
 RESULT 971
 AAx78573
 ID AAX78573 standard; DNA; 20 BP.
 AC AAX78573;
 DT 03-SEP-1999 (first entry)
 DE Human PKC-eta oligonucleotide primer #11.
 KW PKC; human; PKC-alpha; primer; protein kinase C; expression modulator;
 KW PKC-beta type I; PKC-beta type II; PKC-gamma; PKC-eta; PKC-delta;
 KW PKC-epsilon; PKC-zeta; anti-inflammatory; cytotatic;
 KW antisense targeting; isozyme; growth control; hyperproliferative disease;
 KW colon cancer; glioblastoma; bladder cancer; inflammatory condition;
 KW psoriasis; ss.
 OS Synthetic.
 OS Homo sapiens.
 XX US5922686-A.
 XX 13-JUL-1999.
 XX 14-JUN-1996; 96US-00664336.
 XX 16-MAR-1992; 92US-00852852.
 XX 09-JUL-1993; 93US-00089996.
 XX (ISIS-) ISIS PHARM INC.
 XX Dean N, Bennett CF;
 XX WPI; 1999-404471/34.
 XX Oligonucleotides targetted against nucleic acids encoding protein kinase
 PT C.
 PS Example 4; Col 49-50; 56pp; English.
 CC This invention describes novel oligonucleotides (AAx78524-X78644) having
 CC up to 50 nucleotides hybridizable with, and able to modulate the
 CC expression of, a nucleic acid encoding protein kinase C and its isoforms
 CC alpha, beta type I, beta type II, gamma, eta, delta, epsilon and zeta.
 CC The oligonucleotides of the invention have anti-inflammatory and
 CC cytotatic activity and are used for antisense targeting to modulate the
 CC expression of PKC or of a particular PKC isozyme or set of isozymes in

CC cells or tissues. The products of the invention also hybridize with
 CC nucleic acids involved in the modulation of PKC expression, which is
 CC known to be involved growth control in hyperproliferative diseases e.g.
 CC colon cancer, glioblastoma and bladder cancer as well as in inflammatory
 CC conditions e.g. psoriasis. Due to their specificity the oligonucleotides
 CC are able to overcome the problems of toxicity associated with previous
 CC agents designed to modulate PKC expression
 XX
 SQ Sequence 20 BP; 4 A; 3 C; 9 G; 4 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.8; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 1e+03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 946 ATGCTGATGCTGGGAGG 962
 | | | | | | | | | |
 Db 1 AGGCTGATGCTGGGAGG 17
 RESULT 972
 AAx21735
 ID AAx21735 standard; DNA; 20 BP.
 AC AAx21735;
 DT 01-DEC-1999 (first entry)
 DE Exemplary oligonucleotide primer MJD (For).
 KW neoplasia; mutant; target nucleotide; hybridization; lung cancer; ss;
 KW neck cancer; head cancer; saliva test; chemotherapy; early detection;
 KW primer; PCR; amplification.
 OS Synthetic.
 OS Homo sapiens.
 XX WO9946408-A1.
 XX 16-SEP-1999.
 XX 10-MAR-1999; 99WO-US005220.
 XX 10-MAR-1998; 98US-00038637.
 XX (UYJO) UNIV JOHNS HOPKINS SCHOOL MEDICINE.
 XX Sidransky D;
 XX WPI; 1999-551428/46.
 XX Detection of cancers comprises assaying for a genetic mutation associated
 PT with cancer.
 PS Disclosure; Page 25; 99pp; English.
 CC This is an exemplary oligonucleotide primer, for use in the detection of
 CC neoplastic related gene mutations. There are over 40 known proto-
 CC oncogenes and suppressor genes to date, which control growth,
 CC development, and cell differentiation. Regulation of these genes can,
 CC under certain circumstances, be altered and normal cells can assume
 CC neoplastic growth characteristics. The invention provides a method for
 CC detecting a neoplastic disorder of the head and neck or lung in a
 CC subject. The detection of a target mutant nucleotide sequence in the
 CC saliva is indicative of a neoplastic disorder of the head, neck or lung.
 CC This allows early detection and therefore treatment of the preneoplasia
 CC or cancer, and can also be used to monitor high risk patients undergoing
 CC chemoprevention or chemotherapy
 XX
 SQ Sequence 20 BP; 4 A; 5 C; 4 G; 7 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.8; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 1e+03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;


```

PN US5916807-A.
XX
XX
PD 29-JUN-1999.
XX
XX
PF 07-JUN-1995; 95US-00481072.
XX
XX
PR 16-MAR-1992; 92US-00852852.
PR 09-JUL-1993; 93US-00089996.
XX
XX
PA (ISIS-) ISIS PHARM INC.
XX
XX
PI Dean N, Bennett CF;
XX
XX
DR WPI; 1999-403817/34.
XX
XX
PT New antisense oligonucleotides specific for human protein kinase C useful
PT for diagnosis and treatment of cancer and psoriasis.
XX
XX
PS Claim 1; Col 20; 54pp; English.
XX
XX
CC The present invention describes a method of inhibiting the expression of
CC human protein kinase C (PKC) in cells. The method comprises contacting
CC the cells with an antisense oligonucleotide which has up to 50 nucleotide
CC units. AAX83633 to AAX83720 represent specifically claimed antisense
CC oligonucleotides for use in the method of the invention. The antisense
CC oligonucleotides modulate hybridize to messenger RNA from the PKC gene
CC which results in modulation of expression of the PKC gene. This means
CC they can be used for diagnosis, therapeutic or prophylactic treatment of
CC PKC associated diseases such as cancer and psoriasis, and as research
CC agents. Abnormal proliferative states in tissue from patients suspected
CC of having a hyperproliferative disease e.g. cancer, psoriasis can be
CC diagnosed. Tumours associated with PKC can be distinguished from tumours
CC which are not PKC associated to allow an efficacious treatment regime to
CC be used. The antisense oligonucleotides have specific activity so are
CC able to modulate PKC activity without producing side effects and with
CC greater effectiveness than observed from administration of current
CC agents. AAX83721 to AAX83753 represent other oligonucleotides used in
CC examples from the present invention
XX
XX
SQ Sequence 20 BP; 5 A; 2 C; 9 G; 4 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03; Indels 0; Gaps 0;
Matches 15; Conservative 0; Mismatches 2;
QY 946 ATGCTGATGCTGGGAGG 962
DB 2 AGGCTGATGCTGGGAAG 18
RESULT 976
ID AAX83682
XX AAX83682 standard; DNA; 20 BP.
XX
XX
AC AAX83682;
XX
XX
DT 27-AUG-1999 (first entry)
XX
XX
DE Human protein kinase C antisense oligonucleotide SEQ ID NO:50.
XX
XX
KW Human; protein kinase C; PKC; antisense oligonucleotide; diagnosis; ss;
KW hybridisation; cancer; psoriasis; hyperproliferative disease; tumour.
XX
XX
OS Synthetic.
OS Homo sapiens.
XX
XX
PN US5916807-A.
XX
XX
PD 29-JUN-1999.
XX
XX
PF 07-JUN-1995; 95US-00481072.
XX
XX
PR 16-MAR-1992; 92US-00852852.
XX
XX
PA (ISIS-) ISIS PHARM INC.
XX
XX
PI Dean N, Bennett CF;
XX
XX
DR WPI; 1999-403817/34.
XX
XX
PT New antisense oligonucleotides specific for human protein kinase C useful
PT for diagnosis and treatment of cancer and psoriasis.
XX
XX
PS Claim 1; Col 16; 54pp; English.
XX
XX
CC The present invention describes a method of inhibiting the expression of
CC human protein kinase C (PKC) in cells. The method comprises contacting
CC the cells with an antisense oligonucleotide which has up to 50 nucleotide
CC units. AAX83633 to AAX83720 represent specifically claimed antisense
CC oligonucleotides for use in the method of the invention. The antisense
CC oligonucleotides modulate hybridize to messenger RNA from the PKC gene
CC which results in modulation of expression of the PKC gene. This means
CC they can be used for diagnosis, therapeutic or prophylactic treatment of
CC PKC associated diseases such as cancer and psoriasis, and as research
CC agents. Abnormal proliferative states in tissue from patients suspected
CC of having a hyperproliferative disease e.g. cancer, psoriasis can be
CC diagnosed. Tumours associated with PKC can be distinguished from tumours
CC which are not PKC associated to allow an efficacious treatment regime to
CC be used. The antisense oligonucleotides have specific activity so are
CC able to modulate PKC activity without producing side effects and with
CC greater effectiveness than observed from administration of current
CC agents. AAX83721 to AAX83753 represent other oligonucleotides used in
CC examples from the present invention
XX
XX
SQ Sequence 20 BP; 4 A; 3 C; 9 G; 4 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03; Indels 0; Gaps 0;
Matches 15; Conservative 0; Mismatches 2;
QY 946 ATGCTGATGCTGGGAGG 962
DB 1 AGGCTGATGCTGGGAAG 17
RESULT 977
ID AAX96212/c
XX AAX96212 standard; DNA; 20 BP.
XX
XX
AC AAX96212;
XX
XX
DT 13-SEP-1999 (first entry)
XX
XX
DE PCR primer used to amplify an ORF of Chlamydia pneumoniae.
XX
XX
KW Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
KW neutralising epitope; PCR primer; ss.
XX
XX
OS Synthetic.
OS Chlamydia pneumoniae.
XX
XX
PN WO927105-A2.
XX
XX
PD 03-JUN-1999.
XX
XX
PF 20-NOV-1998; 98WO-IB001890.
XX
XX
PR 21-NOV-1997; 97FR-00014673.
PR 04-NOV-1998; 98US-0107078P.
XX
XX
PA (GEST ) GENSET.
XX
XX
PI Griffais R;
XX

```


DR WPI; 1999-357842/30.

XX Genome sequence of Chlamydia pneumoniae.

XX

XX Page 1808; Disclosure; 1912pp; English.

XX

CC AAX91991-X97517 represent PCR primers used to amplify open reading frames

CC and other nucleic acid sequences from the genome of Chlamydia pneumoniae

CC (see AAX91990) . C. pneumoniae causes respiratory disease such as

CC pneumonia and bronchitis and is thought to be a contributing factor in

CC heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema

CC nodosum or pharyngitis. The polypeptides encoded by the open reading

CC frames of the C. pneumoniae genome (see AAY34584- AAY35879) can be used

CC in immunogenic compositions as vaccines. Vectors containing C. pneumoniae

CC nucleic acid sequences can also be used as immunogenic compositions,

CC especially where the vector directs the expression of a neutralising

CC epitope of C. pneumoniae

XX

XX Sequence 20 BP; 2 A; 8 C; 2 G; 8 T; 0 U; 0 Other;

XX

Query Match 0.7%; Score 13.8; DB 1; Length 20;

Best Local Similarity 88.2%; Pred. No. 1e+03;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 321 GTACAGCAAGCAGATGC 337

Db ||| ||||| |||||

17 GTAGAGCAAGGAGATGC 1

RESULT 978

AAX95056/C

ID AAX95056 standard; DNA; 20 BP.

XX

XX AAX95056;

XX

XX 13-SEP-1999 (first entry)

XX

DE PCR primer used to amplify an ORF of Chlamydia pneumoniae.

XX

KW Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;

KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;

KW neutralising epitope; PCR primer; ss.

XX

OS Synthetic.

OS Chlamydothilla pneumoniae.

XX

OS WO9227105-A2.

XX

XX 03-JUN-1999.

XX

XX 20-NOV-1998; 98WO-1B001890.

XX

XX 21-NOV-1997; 97PR-00014673.

PR

XX 04-NOV-1998; 98US-0107078P.

XX

PA (GEST) GENSET.

XX

XX Grifffais R;

XX

XX WPI; 1999-357842/30.

XX

XX Genome sequence of Chlamydia pneumoniae.

XX

XX Page 1718; Disclosure; 1912pp; English.

XX

CC AAX91991-X97517 represent PCR primers used to amplify open reading frames

CC and other nucleic acid sequences from the genome of Chlamydia pneumoniae

CC (see AAX91990) . C. pneumoniae causes respiratory disease such as

CC pneumonia and bronchitis and is thought to be a contributing factor in

CC heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema

CC nodosum or pharyngitis. The polypeptides encoded by the open reading

CC frames of the C. pneumoniae genome (see AAY34584- AAY35879) can be used

CC in immunogenic compositions as vaccines. Vectors containing C. pneumoniae

CC

```

RESULT 980
AAx97505
ID AAX97505 standard; DNA; 20 BP.
XX AC
XX AAX97505;
XX
DT 13-SEP-1999 (first entry)
XX
DE Primer used to amplify Chlamydia pneumoniae polynucleotides.
XX
KW Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
KW neutralising epitope; PCR primer; ss.
XX
XX Synthetic.
XX Chlamydia pneumoniae.
XX WO9927105-A2.
XX
XX 03-JUN-1999.
XX
XX 20-NOV-1998; 98WO-IB001890.
XX
XX 21-NOV-1997; 97FR-00014673.
XX
XX 04-NOV-1998; 98US-0107078P.
XX
XX (GEST ) GENSET.
XX
XX Griffais R;
XX
XX WPI; 1999-357842/30.
XX
XX Genome sequence of Chlamydia pneumoniae.
XX
XX Page 1674; Disclosure; 1912pp; English.
XX
XX AAX91991-X97517 represent PCR primers used to amplify open reading frames
XX and other nucleic acid sequences from the genome of Chlamydia pneumoniae
XX (see AAX91990). C. pneumoniae causes respiratory disease such as
XX pneumonia and bronchitis and is thought to be a contributing factor in
XX heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema
XX nodosum or pharyngitis. The polypeptides encoded by the open reading
XX frames of the C. pneumoniae genome (see AAY34584- AAY35879) can be used
XX in immunogenic compositions as vaccines. Vectors containing C. pneumoniae
XX nucleotides sequences can also be used as immunogenic compositions,
XX especially where the vector directs the expression of a neutralising
XX epitope of C. pneumoniae
XX
XX Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;
XX
XX Page 1909; Disclosure; 1912pp; English.
XX
XX AAX91991-X97517 represent PCR primers used to amplify open reading frames
XX and other nucleic acid sequences from the genome of Chlamydia pneumoniae
XX (see AAX91990). C. pneumoniae causes respiratory disease such as
XX pneumonia and bronchitis and is thought to be a contributing factor in
XX heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema
XX nodosum or pharyngitis. The polypeptides encoded by the open reading
XX frames of the C. pneumoniae genome (see AAY34584- AAY35879) can be used
XX in immunogenic compositions as vaccines. Vectors containing C. pneumoniae
XX nucleotides sequences can also be used as immunogenic compositions,
XX especially where the vector directs the expression of a neutralising
XX epitope of C. pneumoniae
XX
XX Query Match 0.7%; Score 13.8; DB 1; Length 20;
XX Best Local Similarity 88.2%; Pred. No. 1e+03;
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 1697 ACCTTGCCACCATCT 1713
DB 3 ACCTTGCAACCATCT 19
XX
RESULT 981
AAx94491
ID AAX94491 standard; DNA; 20 BP.
XX AC
XX AAX94491;
XX
DT 13-SEP-1999 (first entry)
XX
DE PCR primer used to amplify an ORF of Chlamydia pneumoniae.
XX
KW Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
KW neutralising epitope; PCR primer; ss.

```

```

XX Synthetic.
XX Chlamydia pneumoniae.
XX WO9927105-A2.
XX
XX 03-JUN-1999.
XX
XX 20-NOV-1998; 98WO-IB001890.
XX
XX 21-NOV-1997; 97FR-00014673.
XX
XX 04-NOV-1998; 98US-0107078P.
XX
XX (GEST ) GENSET.
XX
XX Griffais R;
XX
XX WPI; 1999-357842/30.
XX
XX Genome sequence of Chlamydia pneumoniae.
XX
XX Page 1674; Disclosure; 1912pp; English.
XX
XX AAX91991-X97517 represent PCR primers used to amplify open reading frames
XX and other nucleic acid sequences from the genome of Chlamydia pneumoniae
XX (see AAX91990). C. pneumoniae causes respiratory disease such as
XX pneumonia and bronchitis and is thought to be a contributing factor in
XX heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema
XX nodosum or pharyngitis. The polypeptides encoded by the open reading
XX frames of the C. pneumoniae genome (see AAY34584- AAY35879) can be used
XX in immunogenic compositions as vaccines. Vectors containing C. pneumoniae
XX nucleotides sequences can also be used as immunogenic compositions,
XX especially where the vector directs the expression of a neutralising
XX epitope of C. pneumoniae
XX
XX Sequence 20 BP; 3 A; 4 C; 7 G; 6 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 13.8; DB 1; Length 20;
XX Best Local Similarity 88.2%; Pred. No. 1e+03;
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
QY 862 TCTGGGATCGGTAGG 878
DB 4 TCTGGGATCGGTAGG 20
XX
RESULT 982
AAx94591/C
ID AAX94591 standard; DNA; 20 BP.
XX AC
XX AAX94591;
XX
DT 13-SEP-1999 (first entry)
XX
DE PCR primer used to amplify an ORF of Chlamydia pneumoniae.
XX
KW Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
KW neutralising epitope; PCR primer; ss.
XX
XX Synthetic.
XX Chlamydia pneumoniae.
XX WO9927105-A2.
XX
XX 03-JUN-1999.
XX
XX 20-NOV-1998; 98WO-IB001890.
XX
XX 21-NOV-1997; 97FR-00014673.
XX
XX 04-NOV-1998; 98US-0107078P.
XX
XX (GEST ) GENSET.
XX
XX

```

CC	kinase C-alpha (PKC-alpha) mRNA. AAX19127 to AAX19247 represent antisense oligonucleotides from the present invention which bind human PKC-alpha, -beta, -gamma, -delta, -epsilon, -zeta and -eta. The antisense oligonucleotides modulate the expression of the PKC gene (i.e. inhibit the PKC gene). The antisense oligonucleotides can be used to diagnose abnormal proliferative states in tissue or other samples from patients suspected of having a hyperproliferative disease e.g cancer or psoriasis.
CC	The antisense oligonucleotides can be used to distinguish PKC-associated tumours and to detect and diagnose PKC expression (through the use of 32P labeled antisense oligonucleotides).
CC	Radiolabeled antisense oligonucleotides can also be used to perform autoradiography of tissues to determine the localization, distribution and quantitation of PKC expression for research, diagnostic and therapeutic purposes.
CC	The use of the antisense oligonucleotides eliminate the side effects associated with prior art methods because it modulates the amount of PKC protein made from the gene rather than inhibiting the enzyme itself.
CC	(Updated on 20-MAR-2003 to correct PF field.)
XX	
SQ	Sequence 20 BP; 4 A; 3 C; 9 G; 4 T; 0 U; 0 Other;
	Query Match 0.7%; Score 13.8; DB 1; Length 20;
	Best Local Similarity 88.2%; Pred. No. 1e+03; 2; Indels 0; Gaps 0;
	Matches 15; Conservative 0; Mismatches 0; Gaps 0;
QY	946 ATGCTGATGCTGGAGG 962 1 AGGCTGATGCTGGAG 17
Dd	
RESULT 984	
AAX19188	
ID	AAX19188 standard; DNA; 20 BP.
XX	
AC	AAX19188;
XX	
DT	20-MAR-2003 (revised)
DT	14-MAY-1999 (first entry)
XX	
DE	Human PKC-eta antisense oligonucleotide SEQ ID NO:62.
XX	
KW	Human; PKC; protein kinase C; diagnosis; antisense oligonucleotide;
KW	phosphothioate linkage; hyperproliferative disease; cancer; psoriasis;
KW	tumour; inhibition; ss.
XX	
OS	Synthetic.
OS	Homo sapiens.
XX	
PX	US5882927-A.
PN	
XX	16-MAR-1999.
PD	
XX	
PF	07-JUN-1995; 95US-00478178.
XX	
PR	16-MAR-1992; 92US-00852852.
PR	09-JUL-1993; 93US-00089996.
XX	
PA	{ISIS-} ISIS PHARM INC.
PI	
PI	Dean N, Bennett CF;
XX	
DR	WPI; 1999-214073/18.
PT	
PT	New synthetic oligonucleotides inhibiting expression of protein kinase C (PKC)-alpha - useful for treating and diagnosing conditions associated with abnormal PKC expression.
PS	
XX	Example 14; Col 21; 56pp; English.
XX	
CC	The present invention specifically describes antisense oligonucleotides of up to 50 nucleotides in length which specifically bind human protein kinase C-alpha (PKC-alpha) mRNA. AAX19127 to AAX19247 represent antisense oligonucleotides from the present invention which bind human PKC-alpha, -beta, -gamma, -delta, -epsilon, -zeta and -eta. The antisense

CC oligonucleotides modulate the expression of the PKC gene (i.e. inhibit
CC the PKC gene). The antisense oligonucleotides can be used to diagnose
CC abnormal proliferative states in tissue or other samples from patients
CC suspected of having a hyperproliferative disease e.g cancer or psoriasis.
CC The antisense oligonucleotides can be used to distinguish PKC-associated
CC tumours and to detect and diagnose PKC expression (through the use of 32P
CC labeled antisense oligonucleotides). Radiolabeled antisense
CC oligonucleotides can also be used to perform autoradiography of tissues
CC to determine the localization, distribution and quantitation of PKC
CC expression for research, diagnostic and therapeutic purposes. The use of
CC the antisense oligonucleotides eliminate the side effects associated with
CC prior art methods because it modulates the amount of PKC protein made
CC from the gene rather than inhibiting the enzyme itself. (Updated on 20-
CC MAR-2003 to correct PF field.)

XX Sequence 20 BP; 5 A; 2 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03; Indels 0; Gaps 0;
Matches 15; Conservative 0; Mismatches 2;

QY 946 ATGCTGATGCTGGGAGG 962
DB 2 AGGCTGATGCTGGGAAG 18

RESULT 985
AAAX89889
ID AAX89889 standard; DNA; 20 BP.

XX AAX89889;
AC AAX89889;
XX 05-NOV-1999 (first entry)

DE Spinocerebellar ataxia type III (SCAIII) gene amplifying primer.

XX Spinocerebellar ataxia type III; SCAIII; reverse dot hybridisation;
KW PCR-microplate hybridisation; PCR-MPH; trinucleotide repeat; TNR;
XX SCAIII syndrome; PCR primer; ss.

XX Synthetic.
OS Homo sapiens.

XX WO9943852-A1.

XX 02-SEP-1999.

XX 18-FEB-1999; 99WO-KR0000078.

XX 26-FEB-1999; 98KR-00006278.

XX (SMSU) SAMSUNG FINE CHEM CO LTD.
XX (JIND/) JIN D K.

XX Jin DK;

XX WPI; 1999-527634/44.

XX Diagnosis of spinocerebellar ataxia type III (SCA III) syndrome using
XX techniques which ensure highly accurate diagnosis.

XX Claim 1; Page 8; 28pp; English.

XX The invention relates to the diagnosis of spinocerebellar ataxia type III
XX (SCAIII) syndrome using reverse dot hybridisation or PCR-microplate
XX hybridisation (PCR-MPH). The method comprises attaching a portion of the
XX SCAIII gene containing 73 copies of the trinucleotide (CAG) repeat unit
XX (sequence AAX89891) to a substrate, and hybridising with amplified testee
XX genomic DNA containing copies of the trinucleotide units, PCR amplified
XX with labeled primers (AAX89889-90). The new method is useful for
XX diagnosis of SCAIII syndrome, and for determining the severity of the
XX disease. Sequences AAX89889-90 represent PCR primers for amplifying the
XX SCAIII gene fragment

XX Sequence 20 BP; 4 A; 5 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03; Indels 0; Gaps 0;
Matches 15; Conservative 0; Mismatches 2;

QY 1053 CAATGACTACTTTGAAT 1069
DB 2 CAGTGACTACTTTGATT 18

RESULT 986
AAZ27327
ID AAZ27327 standard; DNA; 20 BP.

XX AAZ27327;
AC AAZ27327;

XX 01-DEC-1999 (first entry)

XX Human protein kinase C eta antisense oligonucleotide #21.

XX Human; protein kinase C; PKC; diagnosis; antisense oligonucleotide;
KW phosphorothioate; hybridisation; isozyme; target; inflammation;
KW hyperproliferative disorder; psoriasis; tumour; cancer; glioblastoma; ss.

XX Synthetic.
OS Homo sapiens.

XX US5959096-A.

XX 28-SEP-1999.

XX 07-JUN-1995; 95US-00481066.

XX 16-MAR-1992; 92US-00852852.

XX 09-JUL-1993; 93US-00089996.

XX (ISIS-) ISIS PHARM INC.

XX Bennett CF, Dean N;

XX WPI; 1999-561076/47.

XX Antisense oligonucleotides useful for treatment of hyperproliferative and
XX inflammatory conditions including psoriasis, tumors and cancer.

XX Claim 1; Col 22; 56pp; English.

XX The present invention describes antisense oligonucleotides up to 50
XX nucleotides in length which specifically bind mRNA encoding human protein
XX kinase C (PKC). AAZ27266 to AAZ27386 represent human PKC antisense
XX oligonucleotides used in the exemplification of the present invention.
XX The antisense oligonucleotides are useful for the treatment of diseases
XX associated with PKC expression, such as hyperproliferative and
XX inflammatory conditions including psoriasis, tumours and cancer
XX (glioblastoma, bladder, breast, colon and lung cancer)

XX Sequence 20 BP; 5 A; 2 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03; Indels 0; Gaps 0;
Matches 15; Conservative 0; Mismatches 2;

QY 946 ATGCTGATGCTGGGAGG 962
DB 2 AGGCTGATGCTGGGAAG 18

RESULT 987
AAZ27315
ID AAZ27315 standard; DNA; 20 BP.

XX

```

AC AAZ27315;
XX
XX
DT 01-DEC-1999 (first entry)
XX
XX
DE Human protein kinase C eta antisense oligonucleotide #11.
XX
XX Human; protein kinase C; PKC; diagnosis; antisense oligonucleotide;
KW phosphothioate; hybridisation; isozyme; target; inflammation;
KW hyperproliferative disorder; psoriasis; tumour; cancer; glioblastoma; ss.
XX
XX Synthetic.
OS Homo sapiens.
XX
XX US5959096-A.
PN
XX
XX 28-SEP-1999.
PD
XX
XX 07-JUN-1995; 95US-00481066.
PF
XX
XX 16-MAR-1992; 92US-00852852.
PR
XX 09-JUL-1993; 93US-00089996.
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX Bennett CF, Dean N;
PI
XX
XX WPI; 1999-561076/47.
DR
XX
XX Antisense oligonucleotides useful for treatment of hyperproliferative and
PT inflammatory conditions including psoriasis, tumors and cancer.
XX
XX Claim 1; Col 17; 56pp; English.
XX
XX The present invention describes antisense oligonucleotides up to 50
CC nucleotides in length which specifically bind mRNA encoding human protein
CC kinase C (PKC). AAZ27286 to AAZ27386 represent human PKC antisense
CC oligonucleotides used in the exemplification of the present invention.
CC The antisense oligonucleotides are useful for the treatment of diseases
CC associated with PKC expression, such as hyperproliferative and
CC inflammatory conditions including psoriasis, tumours and cancer
CC (glioblastoma, bladder, breast, colon and lung cancer)
XX
XX Sequence 20 BP; 4 A; 3 C; 9 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 946 ATGCTGATGCTGGAGG 962
DB 1 AGGCTGATGCTGGAGG 17
RESULT 988
AAZ29412/C
ID AAZ29412 standard; DNA; 20 BP.
XX
XX AAX29412;
AC
XX
XX 10-JUN-1999 (first entry)
DT
XX
XX Rat JNK1-specific oligo ISIS No: 21858.
DE
XX
XX Antisense oligonucleotide; Jun N-terminal kinase; JNK; hybridise; JNK1;
KW JNK2; JNK3; cell cycle progression; phosphorylation; tumour; probe; rat;
KW hyperproliferative; stress-activated protein kinase; p54; SAP; ss.
XX
XX Synthetic.
OS Rattus norvegicus.
XX
XX WO9909214-A1.
PN
XX
XX 25-FEB-1999.
PD
XX
XX 07-AUG-1998; 98WO-US016488.
XX
XX 13-AUG-1997; 97US-00910629.
PR
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX McKay R, Dean N, Monia BP, Nero PS, Gaarde WA;
PI
XX
XX WPI; 1999-181060/15.
DR
XX
XX New antisense oligonucleotides that detect and modulate the expression of
PT Jun N-terminal kinase proteins - useful for treating hyperproliferative
PT diseases and inhibiting tumor growth in animals, and for modulating
PT protein phosphorylation by these proteins.
XX
XX Example 7; Page 113; 190pp; English.
XX
XX The invention relates to antisense oligonucleotides that detect and
CC modulate the expression of Jun N-terminal kinase (JNK) proteins. The
CC oligonucleotides specifically hybridize to a nucleic acid encoding a
CC protein. The oligonucleotides are useful for modulating JNK protein
CC expression and cell cycle progression in cultured cells or animal cells.
CC The oligonucleotides are also useful for modulating the phosphorylation
CC of a protein that has been phosphorylated by a JNK protein, and the
CC expression of a cellular protein that promotes one or more metastatic
CC events. The oligonucleotides also form pharmaceutical compositions for
CC treating animals with a hyperproliferative disease, and for inhibiting
CC tumor growth in an animal. The invention also provides sequences that can
CC specifically hybridize to nucleic acids encoding rat stress activated
CC protein kinase (SAP) or p54, a homologue of human JNK protein
XX
XX Sequence 20 BP; 0 A; 9 C; 6 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 3 GCGGAGCCGCGGCGGG 19
DB 17 GCGGAGCCGCGGAGG 1
RESULT 989
ABL41437
ID ABL41437 standard; DNA; 20 BP.
XX
XX ABL41437;
AC
XX
XX 07-MAY-2002 (first entry)
DT
XX
XX Universal primer 34 for the genetic diagnosis of species.
DE
XX
XX Primer; universal primer; genetic diagnosis; ss.
KW
XX
XX Unidentified.
OS
XX
XX KR98082207-A.
PN
XX
XX 05-DEC-1998.
PD
XX
XX 02-MAY-1997; 97KR-00016981.
PF
XX
XX 02-MAY-1997; 97KR-00016981.
PR
XX
XX (RURA-) RURAL DEV ADMINISTRATION.
PA
XX
XX Kang HW, Cho YG, Eun MY, Koh SJ;
PI
XX
XX WPI; 2000-069105/06.
DR
XX
XX Universal primer for genetic diagnosis of species.
PT

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```

XX PS Disclosure; Page 16; 21pp; Korean.
XX
XX The invention relates to universal primers for the genetic diagnosis of
CC species. The current sequence represents a universal primer for the
CC genetic diagnosis of species
XX
XX Sequence 20 BP; 5 A; 9 C; 2 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1695 CCACCTTGCACCCATT 1711
Db 4 CCAGCTTGCACACATT 20

RESULT 990
ABL41420/C
ID ABL41420 standard; DNA; 20 BP.
XX
XX ABL41420;
XX AC
XX DT 07-MAY-2002 (first entry)
XX
XX Universal primer 17 for the genetic diagnosis of species.
DE
XX Primer; universal primer; genetic diagnosis; ss.
XX
XX Unidentified.
XX
XX KR98082207-A.
XX
XX 05-DEC-1998.
XX
XX 02-MAY-1997; 97KR-00016981.
XX
XX 02-MAY-1997; 97KR-00016981.
XX (RURA-) RURAL DEV ADMINISTRATION.
XX
XX Kang HW, Cho YG, Eun MY, Koh SJ;
XX
XX WPI; 2000-069105/06.
XX
XX Universal primer for genetic diagnosis of species.
XX
XX Disclosure; Page 13; 21pp; Korean.
XX
XX The invention relates to universal primers for the genetic diagnosis of
CC species. The current sequence represents a universal primer for the
CC genetic diagnosis of species
XX
XX Sequence 20 BP; 4 A; 2 C; 9 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1695 CCACCTTGCACCCATT 1711
Db 17 CCAGCTTGCACACATT 1

RESULT 991
AAZ73368
ID AAZ73368 standard; DNA; 20 BP.
XX
XX AAZ73368;
XX
XX 10-SEP-2001 (first entry)
XX

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```

DE XX Human biallelic marker upstream amplification primer SEQ ID NO:7724.
XX
XX Human genome; biallelic marker; high density disequilibrium map;
XX genomic map; haplotype; phenotype; polymorphic base; genotyping;
XX haplotyping; hybridisation; identification; characterisation;
XX amplification; single nucleotide polymorphism; SNP; PCR primer;
XX diagnosis; ss.
XX
XX Homo sapiens.
XX
XX WO9954500-A2.
XX
XX 28-OCT-1999.
XX
XX 21-APR-1999; 99WO-IB000822.
XX
XX 21-APR-1998; 98US-0082614P.
XX
XX 23-NOV-1998; 98US-0109732P.
XX
XX (GBST ) GENSET.
XX
XX Cohen D, Blumenfeld M, Chumakov I;
XX
XX WPI; 2000-013267/01.
XX
XX Novel biallelic markers used to construct a high density disequilibrium
XX map of the human genome.
XX
XX Claim 9; Page 1877; 2745pp; English.
XX
XX AAZ65654 to AAZ69578 represent human biallelic markers from the present
XX invention, which contain a polymorphic base at position 24 of their
XX nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
XX primers for the biallelic markers. The biallelic markers of the invention
XX have a variety of uses: they can be used for high density mapping of the
XX human genome, and in complex association studies and haplotyping studies
XX which are useful in determining the genetic basis for disease states.
XX Compositions and methods of the invention can also be useful for the
XX identification of the targets for the development of pharmaceutical
XX agents and diagnostic methods, as well as the characterisation of the
XX differential efficacious responses to and side effects from
XX pharmaceutical agents acting on a disease as well as other treatment.
XX N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
XX 3367, are not actually given a sequence in the Sequence Listing from the
XX present invention
XX
XX Sequence 20 BP; 0 A; 8 C; 3 G; 9 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1978 TGCCCTCTCTGTCTT 1994
Db 1 TGCCCTCTCTGTCTT 17

RESULT 992
AAZ29826/C
ID AAZ29826 standard; DNA; 20 BP.
XX
XX AAZ29826;
XX
XX 25-AUG-2000 (first entry)
XX
XX Human jun N-terminal kinase kinase-2 antisense oligonucleotide #11.
XX
XX Human; jun N-terminal kinase kinase-2; JNK-2; modulation; tumour;
XX antiinflammatory; cytostatic; antinfectious; infection; inflammation;
XX detection; antisense therapy; phosphorothiaote; ss.
XX
XX Homo sapiens.
XX

```


DR WPI; 2000-548813/50.

XX Nucleic acids encoding the novel KCNQ4 potassium channel subunit, useful

PT e.g. for treating tinnitus, deafness, Alzheimer's and Parkinson's

PT diseases.

XX

XX

PS Example 2; Page 25; 65pp; English.

XX

CC Mutations in 3 known genes of the KCNQ branch of the potassium channel

CC gene family underlie inherited cardiac arrhythmia's, neonatal epilepsy

CC and in some cases associated with deafness. KCNQ4 has been mapped to the

CC DFN2 locus for autosomal dominant hearing loss, and a dominant negative

CC KCNQ4 mutation that causes deafness in a DFN2 pedigree has been

CC identified. KCNQ4 is the first potassium channel gene underlying non-

CC syndromic deafness. KCNQ4 forms heteromeric channels with other KCNQ

CC channel subunits, especially KCNQ3. Nucleotides encoding the KCNQ4

CC protein and the protein itself may be used in the prevention, treatment

CC and diagnosis of diseases associated with inappropriate KCNQ4 expression.

CC The nucleotides may also be used as DNA probes in diagnostic assays (e.g.

CC polymerase chain reactions (PCR)) to detect and quantitate the presence

CC of similar nucleic acid sequences in samples and to identify mutations

CC within them, and hence which patients may be in need of restorative

CC therapy. They may also be used to study the expression and function of

CC KCNQ4 polypeptides and their role in metabolism, for example through the

CC production of transgenic animals. The KCNQ4 polypeptides may be used as

CC antigens in the production of antibodies and to identify modulators

CC (agonists and antagonists) of KCNQ4 expression and activity. The anti-

CC KCNQ4 antibodies and KCNQ4 antagonists may also be used to down regulate

CC KCNQ4 expression and activity. They may be used in this way to treat

CC tinnitus, loss of hearing (especially progressive hearing loss, neonatal

CC deafness and presbycusis (deafness of the elderly)) and disease or

CC adverse conditions of the central nervous system (CNS) such as affective

CC disorder, Alzheimer's disease, anxiety, ataxia, CNS damage caused by

CC trauma, stroke or neurodegenerative illness, cognitive deficits,

CC compulsive behavior, dementia, depression, Huntington's disease, mania,

CC memory impairment, neurodegenerative diseases, Parkinson's disease,

CC motor disorders, neurodegenerative diseases, Parkinson's disease,

CC Parkinson-like motor disorders, phobias, Pick's disease, psychosis,

CC schizophrenia, spinal cord damage, stroke and/or tremor. Conversely,

CC antisense nucleic acid molecules may be administered to down regulate

CC KCNQ4 expression by binding with the cells own KCNQ4 genes and preventing

CC their expression. Fourteen intronic primer pairs were used map the KCNQ4

CC gene by amplifying KCNQ4 exons with adjacent short intronic sequences

CC (See AAA47613-A47646). This primer was used to amplify exon 11 and

CC generated a 281 nucleotide fragment

XX

XX Sequence 20 BP; 4 A; 8 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 20;

Best Local Similarity 88.2%; Pred. No. 1e+03; Indels 0; Gaps 0;

Matches 15; Conservative 0; Mismatches 2;

QY 1948 CTGGCCTCACTGAGCC 1964

|||||

Db 4 CTGACCTCACTGATCC 20

RESULT 995

AAA66544

ID AAA66544 standard; DNA; 20 BP.

XX

XX AAA66544;

AC

XX

XX 09-OCT-2000 (first entry)

DE Dog genomic marker oligonucleotide sequence SEQ ID NO:406.

DE

XX Dog; genome; genomic marker; radiation hybrid map; identification;

KW chromosome location; gene marker; polymorphic microsatellite marker;

KW phenotype; behaviour; pedigree; ss.

XX

OS Canis familiaris.

PN WO200029615-A2.

XX

PD 25-MAY-2000.

XX

XX 15-NOV-1999; 99WO-IB001907.

PF

XX 13-NOV-1998; 98US-0108193P.

PR

XX (CNRS) CNRS CENT NAT RECH SCI.

PA

XX Galibert F, Andre C;

PI

XX WPI; 2000-387821/33.

DR

XX New radiation hybrid map of the dog, Canine familiaris, genome, useful

PT for e.g. identifying genes implicated in phenotypic and behavioral traits

PT or in genetic diseases and for studying dog pedigrees.

XX

XX Claim 1; Page 70; 87pp; English.

XX

CC The present invention describes a radiation hybrid map of the dog (Canine

CC familiaris) genome comprising the genome location of a marker selected

CC from AAA66139 to AAA66942. The radiation hybrid map is useful for

CC identifying and localising dog genes, since it covers approximately 80 %

CC of the dog genome and provides a dense map integrating different types

CC (i.e. Type I and Type II) of markers. The map and the dog genome markers

CC (or complementary sequences) are especially useful to identify genes

CC responsible for phenotypic and behavioural traits in dogs, to identify

CC morbid genes, to analyse diseases and identify implicated genes in such

CC diseases and their alleles, and to study dog pedigrees. They may also be

CC useful for isolating corresponding human gene sequences e.g. genes

CC involved in genetic diseases

XX

XX Sequence 20 BP; 5 A; 5 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 20;

Best Local Similarity 88.2%; Pred. No. 1e+03; Indels 0; Gaps 0;

Matches 15; Conservative 0; Mismatches 2;

QY 1818 AGCTTTGGAAAGGTGCC 1834

|||||

Db 4 AGCTTAGCAAGGTGCC 20

RESULT 996

AAA66602

ID AAA66602 standard; DNA; 20 BP.

XX

XX AAA66602;

AC

XX

XX 09-OCT-2000 (first entry)

DE Dog genomic marker oligonucleotide sequence SEQ ID NO:464.

DE

XX Dog; genome; genomic marker; radiation hybrid map; identification;

KW chromosome location; gene marker; polymorphic microsatellite marker;

KW phenotype; behaviour; pedigree; ss.

XX

OS Canis familiaris.

XX

XX WO200029615-A2.

PN

XX 25-MAY-2000.

XX

XX 15-NOV-1999; 99WO-IB001907.

PF

XX 13-NOV-1998; 98US-0108193P.

PR

XX (CNRS) CNRS CENT NAT RECH SCI.

PA

XX Galibert F, Andre C;

PI

XX WPI; 2000-387821/33.

DR

XX New radiation hybrid map of the dog, Canine familiaris, genome, useful
 PT for e.g. identifying genes implicated in phenotypic and behavioral traits
 PT or in genetic diseases and for studying dog pedigrees.

XX Claim 1; Page 73; 87pp; English.

XX The present invention describes a radiation hybrid map of the dog (Canine
 CC familiaris) genome comprising the genome location of a marker selected
 CC from AAA66139 to AAA66942. The radiation hybrid map is useful for
 CC identifying and localising dog genes, since it covers approximately 80 %
 CC of the dog genome and provides a dense map integrating different types
 CC (i.e. Type I and Type II) of markers. The map and the dog genome markers
 CC (or complementary sequences) are especially useful to identify genes
 CC responsible for phenotypic and behavioural traits in dogs, to identify
 CC morbid genes, to analyse diseases and identify implicated genes in such
 CC diseases and their alleles, and to study dog pedigrees. They may also be
 CC useful for isolating corresponding human gene sequences e.g. genes
 CC involved in genetic diseases

XX Sequence 20 BP; 5 A; 5 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 1e+03; Mismatches 0; Gaps 0;
 Matches 15; Conservative 0; Indels 2; Indels 0; Gaps 0;

QY 1818 AGCTTTGGAAAGGTGCC 1834
 ||||| ||||| |||||
 Db 4 AGCTTAGCAAAGGTGCC 20

RESULT 997

ABK10234
 ID ABK10234 standard; DNA; 20 BP.

XX AC ABK10234;

XX 20-MAY-2002 (first entry)

XX MJD 52 PCR primer.

XX PCR; primer; ss; MJD52; trinucleotide repeat; fragile X syndrome;
 KW spinocerebellar ataxia type III; hereditary hypertrophic cardiomyopathy;
 KW dentatorubral and pallidolysian atrophy; DRPLA; spinocerebellar ataxia;
 KW Marfan syndrome; X-linked spinobular atrophy.

XX Homo sapiens.

XX KR2000003004-A.

XX 15-JAN-2000.

XX 25-JUN-1998; 98KR-00024064.

XX 25-JUN-1998; 98KR-00024064.

XX (SMSU) SAMSUNG MEDICAL CENT.
 PA (JIND/) JIN D G.

XX Jin DG;

XX WPI; 2000-662424/64.

XX Plasmid vector arraying neuropsychiatric gene more than copy number
 PT containing trinucleotide repeats its use thereof.

XX Disclosure; Page 5; 23pp; Korean.

XX This invention relates to the use of a plasmid vector array containing a
 CC neuropsychiatric gene containing trinucleotide repeats. Tri-nucleotide
 CC repeats and their expansion are known to be involved in a number of
 CC diseases including fragile X syndrome, spinocerebellar ataxia type III,
 CC hereditary hypertrophic, cardiomyopathy, dentatorubral and pallidolysian

CC atrophy (DRPLA), spinocerebellar ataxia, Marfan syndrome; X-linked
 CC spinobular atrophy. The present sequence represents the MJD52 PCR primer
 CC used in the method of the invention

XX Sequence 20 BP; 4 A; 5 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 1e+03; Mismatches 0; Gaps 0;
 Matches 15; Conservative 0; Indels 2; Indels 0; Gaps 0;

QY 1053 CAATGACTACTTTGAAT 1069
 ||||| ||||| |||||
 Db 2 CAGTGACTACTTTGATT 18

RESULT 998

AAC66864

ID AAC66864 standard; DNA; 20 BP.

XX AC AAC66864;

XX 27-FEB-2001 (first entry)

XX Human tankyrase II coding sequence PCR primer LTANKII-31.

XX Human; tankyrase II; telomere length; signal transduction; PCR primer;
 ss.

XX Homo sapiens.

XX WO2000061813-A1.

XX 19-OCT-2000.

XX 10-APR-2000; 2000WO-US009558.

XX 09-APR-1999; 99US-0128577P.

XX 13-APR-1999; 99US-0129123P.

XX (GERO-) GERON CORP.

XX Morin GB, Funk WD, Piatyszek MA;

XX WPI; 2000-679503/66.

XX Novel mammalian Tankyrase II polypeptide and the polynucleotide encoding
 PT the polypeptide useful for modulating or maintaining telomere length,
 PT replicative capacity, apoptosis, chromosome packing or gene expression.

XX Example 4; Page 20; 52pp; English.

XX The present invention relates to the isolation of the protein and coding
 CC sequences of human tankyrase II. This protein is thought to be involved
 CC in signal transduction in the cell, and to have binding activity for
 CC other telomere-associated proteins. It is possible that it plays a role
 CC in the regulation of telomere length, thus affecting the replicative
 CC ability of the cell. The protein is useful for ribosylating target
 CC proteins, for determining tankyrase II binding activity in a sample, and
 CC for modulating telomere length in a cell. The present sequence is a PCR
 CC primer used to amplify the tankyrase II coding sequence

XX Sequence 20 BP; 2 A; 5 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 1e+03; Mismatches 0; Gaps 0;
 Matches 15; Conservative 0; Indels 2; Indels 0; Gaps 0;

QY 471 TGGGGGCTGCACCATG 487

Db 1 TTGGGGTCTGCACCATG 17

RESULT 999

AAC59862/C
ID AAC59862 standard; DNA; 20 BP.
XX
AC AAC59862;
XX
DT 26-JAN-2001 (first entry)
XX
DE Oligonucleotide probe for human DNA clone vb28 1.
XX
KW Secreted protein; human; autoimmune disorder; multiple sclerosis; ulcer;
KW systemic lupus erythematosus; rheumatoid arthritis; anaemia; stroke;
KW hematopoiesis regulation; tissue regrowth; wound healing; haemophilia;
KW Alzheimer's disease; Parkinson's disease; Shy-drager syndrome; cancer;
KW contraceptive; infection; growth inhibition; hyperproliferative disorder;
KW psoriasis; probe; ss.
XX
OS Homo sapiens.
XX
PN W0200055375-A1.
XX
PD 21-SEP-2000.
XX
PF 17-MAR-2000; 2000WO-US007285.
XX
PR 17-MAR-1999; 99US-0124808P.
PR 17-MAR-1999; 99US-0124916P.
PR 17-AUG-1999; 99US-0149639P.
PR 01-OCT-1999; 99US-0157247P.
PR 29-NOV-1999; 99US-0167824P.
PR 15-FEB-2000; 2000US-0182711P.
XX
PA (ALPH-) ALPHAGENE INC.
XX
PI Valenzuela D, Yuan O, Hoffman H, Hall J, Rapiejko P;
XX
XX WPI; 2000-638211/61.
XX
XX Novel proteins and polypeptides useful for the treatment of e.g multiple
XX sclerosis, systemic lupus erythematosus, rheumatoid arthritis, cancer,
XX Alzheimer's disease, Parkinson's disease, stroke, anemia and ulcers.
XX
XX Disclosure; Page 467; 493pp; English.
XX
XX This invention relates to 59 human secreted proteins and the nucleotide
XX sequences encoding them. Sequences AAC59788-C59846 and AAB34687-B34745
XX represent the proteins and their encoding nucleotide sequences, and
XX the DNA sequences are represented by sequences AAC59847-C59596. The
XX proteins exhibit neuroprotective, dermatological, immunosuppressive,
XX antiinflammatory, antianaemic, nootropic, antiparkinsonian,
XX cerebroprotective, haemostatic, vulnerary, cytostatic, antipsoriatic,
XX antibacterial, virucide, and fungicide activity. The proteins and
XX nucleotide sequences are useful as nutritional sources or supplements and
XX in research. The proteins are useful for treating immune deficiency and
XX disorders, which may be genetic or resulting from infections, autoimmune
XX disorders such as multiple sclerosis, systemic lupus erythematosus,
XX rheumatoid arthritis, and for treating myeloid or lymphoid cell
XX deficiencies such as anaemias by regulating haematopoiesis. The proteins
XX are also useful in compositions for bone, cartilage, tendon, ligament
XX and/or nerve tissue growth or regeneration, for wound healing, tissue
XX repair and replacement and in the treatment of wounds, incisions and
XX ulcers. Other uses include in the treatment of central and peripheral
XX nervous system and neuropathies such as Alzheimer's and Parkinson's
XX diseases and Shy-Drager syndrome, and mechanical and traumatic disorders,
XX such as spinal cord disorders, head trauma and stroke. The proteins may
XX also be used as a contraceptive, and for treating coagulation disorders
XX such as haemophilia. The protein and nucleotide sequences with cadherin
XX activity are useful for treating cancer. Other uses for the protein
XX include for inhibiting the growth, infection or function of, or killing,
XX infectious agents such as bacteria, virus, fungi and other parasites, for
XX effecting bodily characteristics such as height, weight, hair colour,
XX effecting biorhythms or cardiac cycles or rhythms, effecting metabolism,
XX catabolism, anabolism, processing, utilization, storage or elimination of

CC dietary fat, lipid, protein, carbohydrate, vitamins, minerals, cofactors,
CC effecting behavioural characteristics, providing analgesic effects and
CC for treating hyperproliferative disorders such as psoriasis
XX
SQ Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03; Indels 0; Gaps 0;
Matches 15; Conservative 0; Mismatches 2;
Qy 416 TGGCAAGTCTGTGCAA 432
Db 19 TGTCAAGTCTGTGCAA 3
RESULT 1000
AAF55055
ID AAF55055 standard; DNA; 20 BP.
XX
AC AAF55055;
XX
DT 15-MAY-2001 (first entry)
XX
DE PCR primer used to amplify a fragment of the mumps genome.
XX
KW Encapsidation protein; transcription protein; replication protein;
KW cell targeting; gene therapy; attenuated virus; vaccine; mumps;
KW PCR primer; ss.
XX
OS Mumps virus.
XX
PN W0200109309-A2.
XX
PD 08-FEB-2001.
XX
PF 02-AUG-2000; 2000WO-US021192.
XX
PR 02-AUG-1999; 99US-0146664P.
PR 23-JUN-2000; 2000US-0213654P.
XX
PA (AMHP) AMERICAN HOME PROD CORP.
XX
PI Clarke DK, Johnson EJ, Sidhu MS, Udem SA;
XX
XX WPI; 2001-123320/13.
XX
XX Producing a recombinant mumps virus (MUV), useful as a mumps vaccine, by
XX transfecting or transforming a host cell with a transcription vector
XX comprising a MUV genome or antigenome, and an expression vector encoding
XX trans-acting proteins.
XX
XX Example 1; Page 37; 133pp; English.
XX
XX PCR primers AAF55055-56 were used to amplify a fragment of the Mumps
XX virus genome. The amplified fragment was used in the course of the
XX invention. The specification describes a method for producing a
XX recombinant mumps virus. The method comprises transfecting or
XX transforming, in a rescue composition media, a host cell with a
XX transcription vector comprising a genome or antigenome of mumps virus,
XX and an expression vector encoding trans-acting proteins (NP, P and L)
XX necessary for encapsidation, transcription and replication. The method is
XX carried out under conditions sufficient to permit the co-expression of
XX the vectors and the production of the recombinant virus. The recombinant
XX virus has an ability to induce long-lasting immunity with a single dose
XX and a relatively low level of genome recombination. The recombinant
XX produced Mumps viruses are useful in antibody generation, diagnostic,
XX prophylactic and therapeutic applications, cell targeting, gene therapy.
XX mutant virus preparation and immunogenic composition preparation. The
XX method may also produce an attenuated virus for use as a vaccine for
XX preventing or ameliorating mumps infection
XX
XX Sequence 20 BP; 6 A; 3 C; 5 G; 6 T; 0 U; 0 Other;

Query Match	0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity	88.2%; Pred. No. 1e+03;
Matches	15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY	585 CATTGATATTCACCATG 601
DB	
	4 CATTGATATTCACCATG 20
RESULT 1001	
AAAF73053/c	
ID	AAAF73053 standard; DNA; 20 BP.
XX	AC
XX	AAAF73053;
XX	24-APR-2001 (first entry)
XX	Human daxx inhibitory antisense phosphorothioate oligonucleotide SEQ.154.
XX	Antisense oligonucleotide; daxx; inhibition; phosphorothioate;
KW	Fas binding protein; CENP-C binding protein; dap6; EAP; cytostatic;
KW	antiinflammatory; death associated protein 6; Ets-1 associated protein;
KW	infection; inflammation; tumour formation; ss.
XX	Homo sapiens.
OS	US6180353-B1.
PN	30-JAN-2001.
XX	24-JAN-2000; 2000US-00490692.
XX	24-JAN-2000; 2000US-00490692.
XX	(ISIS-) ISIS PHARM INC.
PA	Dean NM, Cowser LM;
XX	WPI; 2001-217744/22.
XX	Novel antisense compounds capable of modulating expression of daxx useful
PT	for diagnosis, prophylaxis and treatment of diseases associated with
PT	expression of daxx.
XX	Claim 1; Col 49; 59pp; English.
PS	The present invention describes an antisense compound (I) up to 30
CC	nucleobases in length, where (I) inhibits expression of daxx (also known
CC	as Fas binding protein, CENP-C binding protein, dap6 for death associated
CC	protein 6 and EAP for Ets-1 associated protein). (I) has cytostatic and
CC	antiinflammatory activity, and can be used in inhibiting the expression of daxx in
CC	cells or tissues in vitro. (I) can be utilised for diagnostics,
CC	therapeutics for the treatment of diseases associated with the expression
CC	of daxx, prophylaxis e.g. to prevent or delay infection, inflammation or
CC	tumour formation and as research reagent. The present sequence represents
CC	an inhibitory human daxx antisense phosphorothioate oligonucleotide which
CC	is used in the exemplification of the present invention
XX	Sequence 20 BP; 1 A; 9 C; 1 G; 9 T; 0 U; 0 Other;
SQ	
Query Match	0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity	88.2%; Pred. No. 1e+03;
Matches	15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY	1422 AGAGGAGGAAGAAG 1438
DB	
	19 AGAGGAGGAAGAAG 3
RESULT 1002	
ABZ80688/c	
ID	ABZ80688 standard; DNA; 20 BP.

Query Match	0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity	88.2%; Pred. No. 1e+03;
Matches	15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY	585 CATTGATATTCACCATG 601
DB	
	4 CATTGATATTCACCATG 20
RESULT 1001	
AAAF73053/c	
ID	AAAF73053 standard; DNA; 20 BP.
XX	AC
XX	AAAF73053;
XX	24-APR-2001 (first entry)
XX	Human daxx inhibitory antisense phosphorothioate oligonucleotide SEQ.154.
XX	Antisense oligonucleotide; daxx; inhibition; phosphorothioate;
KW	Fas binding protein; CENP-C binding protein; dap6; EAP; cytostatic;
KW	antiinflammatory; death associated protein 6; Ets-1 associated protein;
KW	infection; inflammation; tumour formation; ss.
XX	Homo sapiens.
OS	US6180353-B1.
PN	30-JAN-2001.
XX	24-JAN-2000; 2000US-00490692.
XX	24-JAN-2000; 2000US-00490692.
XX	(ISIS-) ISIS PHARM INC.
PA	Dean NM, Cowser LM;
XX	WPI; 2001-217744/22.
XX	Novel antisense compounds capable of modulating expression of daxx useful
PT	for diagnosis, prophylaxis and treatment of diseases associated with
PT	expression of daxx.
XX	Claim 1; Col 49; 59pp; English.
PS	The present invention describes an antisense compound (I) up to 30
CC	nucleobases in length, where (I) inhibits expression of daxx (also known
CC	as Fas binding protein, CENP-C binding protein, dap6 for death associated
CC	protein 6 and EAP for Ets-1 associated protein). (I) has cytostatic and
CC	antiinflammatory activity, and can be used in inhibiting the expression of daxx in
CC	cells or tissues in vitro. (I) can be utilised for diagnostics,
CC	therapeutics for the treatment of diseases associated with the expression
CC	of daxx, prophylaxis e.g. to prevent or delay infection, inflammation or
CC	tumour formation and as research reagent. The present sequence represents
CC	an inhibitory human daxx antisense phosphorothioate oligonucleotide which
CC	is used in the exemplification of the present invention
XX	Sequence 20 BP; 1 A; 9 C; 1 G; 9 T; 0 U; 0 Other;
SQ	
Query Match	0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity	88.2%; Pred. No. 1e+03;
Matches	15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY	1422 AGAGGAGGAAGAAG 1438
DB	
	19 AGAGGAGGAAGAAG 3
RESULT 1002	
ABZ80688/c	
ID	ABZ80688 standard; DNA; 20 BP.

Query Match	0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity	88.2%; Pred. No. 1e+03;
Matches	15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY	585 CATTGATATTCACCATG 601
DB	
	4 CATTGATATTCACCATG 20
RESULT 1001	
AAAF73053/c	
ID	AAAF73053 standard; DNA; 20 BP.
XX	AC
XX	AAAF73053;
XX	24-APR-2001 (first entry)
XX	Human daxx inhibitory antisense phosphorothioate oligonucleotide SEQ.154.
XX	Antisense oligonucleotide; daxx; inhibition; phosphorothioate;
KW	Fas binding protein; CENP-C binding protein; dap6; EAP; cytostatic;
KW	antiinflammatory; death associated protein 6; Ets-1 associated protein;
KW	infection; inflammation; tumour formation; ss.
XX	Homo sapiens.
OS	US6180353-B1.
PN	30-JAN-2001.
XX	24-JAN-2000; 2000US-00490692.
XX	24-JAN-2000; 2000US-00490692.
XX	(ISIS-) ISIS PHARM INC.
PA	Dean NM, Cowser LM;
XX	WPI; 2001-217744/22.
XX	Novel antisense compounds capable of modulating expression of daxx useful
PT	for diagnosis, prophylaxis and treatment of diseases associated with
PT	expression of daxx.
XX	Claim 1; Col 49; 59pp; English.
PS	The present invention describes an antisense compound (I) up to 30
CC	nucleobases in length, where (I) inhibits expression of daxx (also known
CC	as Fas binding protein, CENP-C binding protein, dap6 for death associated
CC	protein 6 and EAP for Ets-1 associated protein). (I) has cytostatic and
CC	antiinflammatory activity, and can be used in inhibiting the expression of daxx in
CC	cells or tissues in vitro. (I) can be utilised for diagnostics,
CC	therapeutics for the treatment of diseases associated with the expression
CC	of daxx, prophylaxis e.g. to prevent or delay infection, inflammation or
CC	tumour formation and as research reagent. The present sequence represents
CC	an inhibitory human daxx antisense phosphorothioate oligonucleotide which
CC	is used in the exemplification of the present invention
XX	Sequence 20 BP; 1 A; 9 C; 1 G; 9 T; 0 U; 0 Other;
SQ	
Query Match	0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity	88.2%; Pred. No. 1e+03;
Matches	15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY	1422 AGAGGAGGAAGAAG 1438
DB	
	19 AGAGGAGGAAGAAG 3
RESULT 1002	
ABZ80688/c	
ID	ABZ80688 standard; DNA; 20 BP.

XX DR WPI; 2001-168572/17.

XX PT Novel antisense compound targeted to a nucleic acid molecule encoding

XX PT human SHP-2 is useful for inhibiting the expression of human SHP-2 and

XX PT treating diabetes and inflammatory disorders.

XX PT

XX Example 15; Page 78; 98pp; English.

XX This invention relates to antisense oligonucleotide sequences which

CC target DNA encoding human SHP-2 (a member of the family of non-membrane

CC tyrosine phosphatases). Sequences AAF73768 - AAF73807 represent antisense

CC oligonucleotides which have phosphorothioate backbones, and optionally

CC flanked with 5 base wings with 2'-methoxyethyl (MOE) nucleotides. These

CC oligonucleotides target SHP-2 (represented in AAF73761) and inhibit its

CC expression. Sequences AAF73762 - AAF73767 represent PCR primers and

CC probes for human SHP-2 and GAPDH (glyceraldehyde 3-phosphate

CC dehydrogenase) which are used in quantitative PCR analysis of SHP-2 mRNA

CC levels. The antisense oligonucleotides are useful for inhibiting the

CC expression of SHP-2 in human cells or tissues. The oligonucleotides are

CC also useful for treating a human having a disease or condition associated

CC with SHP-2 such as diabetes or an inflammatory disorder. The antisense

CC compounds can be utilized for diagnostics, therapeutics, prophylaxis and

CC as research reagents and kits. The antisense compounds may also be useful

CC prophylactically, e.g. to prevent or delay infection, inflammation or

CC tumour formation. The antisense compounds are useful for research and

CC diagnostics

XX SQ Sequence 20 BP; 11 A; 3 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 20;

Best Local Similarity 88.2%; Pred. No. 1e+03; Indels 0; Gaps 0;

Matches 15; Conservative 0; Mismatches 2;

Oy 579 CATTGACATTCATATTC 595

Db 19 CATTGTGATTCATATTC 3

RESULT 1004

AAH56619

XX ID AAH56619 standard; DNA; 20 BP.

XX AC AAH56619;

XX DT 06-SEP-2001 (first entry)

XX DE Streptococcus pyogenes groEL antisense oligonucleotide SEQ ID NO:267.

XX KW Antisense oligonucleotide; groE; groEL; groES; inhibitor; growth;

XX KW microorganism; Escherichia coli; Streptococcus pneumoniae; diagnosis;

XX KW Streptococcus pyogenes; Staphylococcus aureus; Pseudomonas aeruginosa;

XX KW antibacterial; antiviral; antiproliferative; antisense therapy;

XX KW microbial infection; ss.

XX OS Streptococcus pyogenes.

XX PN WO200136625-A2.

XX PD 25-MAY-2001.

XX PF 20-NOV-2000; 2000WO-CA001347.

XX PR 18-NOV-1999; 99US-0166249P.

XX PA (GENE-) GENESENSE TECHNOLOGIES INC.

XX PI Wright JA, Young AH, Dugourd D;

XX DR WPI; 2001-355633/37.

XX Novel antisense compounds targeting nucleic acid encoding groEL or groES

XX PT gene of microorganism, which hybridize with and inhibit expression of the

genes, useful to inhibit growth of microorganism having the genes.

Claim 3; Page 48; 110pp; English.

The present invention specifically claims AAH56368 to AAH56832 which are

antisense oligonucleotides to nucleotide sequences encoding groE. More

generally, antisense compounds (I) comprising antisense oligonucleotides

of 5-50 bases targeted to a nucleotide sequence encoding groEL (heat

shock protein (HSP)60) (GL) and groES (HSP10) (GS) gene from a

microorganism, where the antisense compound is complementary to GL or GS

of a microorganism and specifically hybridises with and inhibits the

expression of GL or GS, is claimed. (I) have antibacterial, antiviral and

antiproliferative activities, and can be used in antisense therapy and

for inhibition of expression of groES or groEL. (I) are useful for

inhibiting expression of GL or GS in cells or tissues in vitro. (I) are

also useful for inhibiting the growth of a microorganism, or inhibiting

the expression of GL or GS gene in a microorganism (a bacterial cell or a

virus) having a GL or GS gene which involves administering to the

microorganism or to a cell infected with the microorganism, (I). (I) are

also useful for treating a mammalian pathological condition mediated by

the microorganisms which involves identifying a eukaryotic organism

having a pathological condition mediated by microorganisms having a GL or

GS gene and administering (I) such that the growth of microorganism is

inhibited. The antisense compounds are utilised for diagnostics,

therapeutics, prophylaxis and as research reagents and kits e.g. to

prevent or delay microbial infections in humans. They are also useful as

molecular weight markers. AAH56362 to AAH56367 and AAH56833 to AAH56854

represent PCR primers for groE sequences which are used in the

exemplification of the present invention. AAH56855 to AAH56870 represent

groE nucleotide sequence given in the present invention

XX SQ Sequence 20 BP; 3 A; 6 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 20;

Best Local Similarity 88.2%; Pred. No. 1e+03; Indels 0; Gaps 0;

Matches 15; Conservative 0; Mismatches 2;

Oy 1926 GTTCTGTTTGTGACCT 1942

Db 2 GTTCTGTTTCCATACCT 18

RESULT 1005

AAH56819

XX ID AAH56819 standard; DNA; 20 BP.

XX AC AAH56819;

XX DT 24-OCT-2001 (first entry)

XX DE Human caspase 3 antisense oligonucleotide 108943.

XX KW Human; caspase 3; apoptosis; hyperproliferative disorder; hepatitis;

XX KW viral infection; haematopoietic disorder; autoimmune disorder;

XX KW atherosclerosis; neurological disorder; antisense; phosphorothioate; ss.

XX OS Homo sapiens.

XX PN WO200153310-A1.

XX PD 26-JUL-2001.

XX PR 11-JAN-2001; 2001WO-US000889.

XX Key modified base 1,20

XX Location/Qualifiers

XX /mod base= OTHER

XX /note= "OTHER= phosphorothioate internucleotide linkages.

XX Some bases especially bases 1-5 and bases 16-20 are 2'-

XX methoxyethyl (2'-MOE) bases, bases 6-15 are 2'-

XX deoxynucleotides and all cytidine bases are 5'-

XX methylcytidines"

```

XX PR 18-JAN-2000; 2000US-00484617.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Zhang H, Cowser LM;
XX DR WPI; 2001-442252/47.
XX PT New antisense compound to inhibit caspase 3 is useful for treating
XX PT hepatitis and atherosclerosis.
XX PS Claim 3; Page 83; 127pp; English.
XX CC The present sequence for human caspase 3 antisense oligonucleotide 108843
XX CC is 1 of various novel antisense oligonucleotides (AAS10517-AAS10676)
XX CC described in the present invention. Also described are methods of using
XX CC these compounds for the modulation of caspase 3 expression. The caspase 3
XX CC antisense oligonucleotides specifically hybridise with and inhibit the
XX CC expression of caspase 3. Antisense compounds targeted to caspase 3 are
XX CC useful to inhibit caspase 3 expression in cells or tissues and to
XX CC modulate apoptosis. The caspase 3 antisense oligonucleotides are useful
XX CC for treating disorders associated with expression of caspase 3. Such
XX CC disorders include hyperproliferative disorders (e.g. cancer), viral
XX CC infections (e.g. hepatitis), haematopoietic disorders, autoimmune
XX CC disorders, atherosclerosis and neurological disorders (e.g. Alzheimer's
XX CC disease)
XX SQ Sequence 20 BP; 5 A; 6 C; 6 G; 3 T; 0 U; 0 Other;
      Query Match      0.7%; Score 13.8; DB 1; Length 20;
      Best Local Similarity 88.2%; Pred. No. 1e+03;
      Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1012 GCTGTGCGCCCTGGATAC 1028
Db 1 GCTGTGCGCCACGGATAC 17

RESULT 1006
AAD08224
ID AAD08224 standard; DNA; 20 BP.
XX AC AAD08224;
XX DT 08-AUG-2001 (first entry)
XX DE Human DNA helicase, NHL gene amplifying RT-PCR primer, HDIZ.
XX KW Human; DNA helicase; NHL; cytosolic; neoplastic disorder; xeroderma;
XX KW genetic disorder; multiple sclerosis; pigmentosum; Cockayne's syndrome;
XX KW Bloom's syndrome; Werner's syndrome; therapy; RT-PCR primer; ss.
XX OS Homo sapiens.
XX PN WO200142434-A1.
XX PD 14-JUN-2001.
XX PF 07-DEC-2000; 2000WO-US033065.
XX PR 09-DEC-1999; 99US-0169970P.
XX PA (MERI ) MERCK & CO INC.
XX PI Liu X, Bai C, Metzker ML;
XX DR WPI; 2001-381666/40.
XX PD 14-JUN-2001.
XX PF 07-DEC-2000; 2000WO-US033065.
XX PR 09-DEC-1999; 99US-0169970P.
XX PA (MERI ) MERCK & CO INC.
XX PI Liu X, Bai C, Metzker ML;
XX DR WPI; 2001-381666/40.
XX PT Novel polynucleotide encoding mammalian DNA helicase, NHL, useful for
XX PT screening and measuring levels of NHL, and for formulating kits suitable
XX PT for detecting and typing NHL.

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PS Example 1; Page 93; 169pp; English.
XX CC The invention relates to human DNA helicase protein, NHL and its
XX CC corresponding DNA molecule. NHL gene is localised on human chromosome 20
XX CC (20q13.3). NHL protein and its DNA are useful for treating various
XX CC neoplastic disorders and genetic disorders such as multiple sclerosis,
XX CC including xeroderma, pigmentosum, Cockayne's syndrome, Bloom's syndrome
XX CC and Werner's syndrome. NHL protein is useful for selecting compounds
XX CC active against neoplastic disorders. NHL protein is useful for screening
XX CC and measuring levels of NHL, and for formulating kits suitable for
XX CC detecting and typing NHL. The invention also relates to a method for
XX CC identifying modulators of NHL activity. The present DNA sequence is RT-
XX CC (reverse transcriptase) PCR primer which is used for identifying and
XX CC sequencing human DNA helicase, NHL gene. Human NHL exon 2/3 sequence is
XX CC confirmed by this RT-PCR primer
XX SQ Sequence 20 BP; 3 A; 3 C; 8 G; 6 T; 0 U; 0 Other;
      Query Match      0.7%; Score 13.8; DB 1; Length 20;
      Best Local Similarity 88.2%; Pred. No. 1e+03;
      Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 373 GATGGCTGTTCAGTT 389
Db 1 GATGACCTGTGAGTT 17

RESULT 1007
AAD08225/c
ID AAD08225 standard; DNA; 20 BP.
XX AC AAD08225;
XX DT 08-AUG-2001 (first entry)
XX DE Human DNA helicase, NHL gene amplifying RT-PCR primer, HDJA.
XX KW Human; DNA helicase; NHL; cytosolic; neoplastic disorder; xeroderma;
XX KW genetic disorder; multiple sclerosis; pigmentosum; Cockayne's syndrome;
XX KW Bloom's syndrome; Werner's syndrome; therapy; RT-PCR primer; ss.
XX OS Homo sapiens.
XX PN WO200142434-A1.
XX PD 14-JUN-2001.
XX PF 07-DEC-2000; 2000WO-US033065.
XX PR 09-DEC-1999; 99US-0169970P.
XX PA (MERI ) MERCK & CO INC.
XX PI Liu X, Bai C, Metzker ML;
XX DR WPI; 2001-381666/40.
XX PD 14-JUN-2001.
XX PF 07-DEC-2000; 2000WO-US033065.
XX PR 09-DEC-1999; 99US-0169970P.
XX PA (MERI ) MERCK & CO INC.
XX PI Liu X, Bai C, Metzker ML;
XX DR WPI; 2001-381666/40.
XX PT Novel polynucleotide encoding mammalian DNA helicase, NHL, useful for
XX PT screening and measuring levels of NHL, and for formulating kits suitable
XX PT for detecting and typing NHL.
XX PS Example 1; Page 93; 169pp; English.
XX CC The invention relates to human DNA helicase protein, NHL and its
XX CC corresponding DNA molecule. NHL gene is localised on human chromosome 20
XX CC (20q13.3). NHL protein and its DNA are useful for treating various
XX CC neoplastic disorders and genetic disorders such as multiple sclerosis,
XX CC including xeroderma, pigmentosum, Cockayne's syndrome, Bloom's syndrome
XX CC and Werner's syndrome. NHL protein is useful for selecting compounds
XX CC active against neoplastic disorders. NHL protein is useful for screening
XX CC and measuring levels of NHL, and for formulating kits suitable for
XX CC detecting and typing NHL. The invention also relates to a method for
XX CC identifying modulators of NHL activity. The present DNA sequence is RT-

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CC (reverse transcriptase) PCR primer which is used for identifying and
 CC sequencing human DNA helicase, NHL gene. Human NHL exon 3-9 and 9-13
 CC sequence are confirmed by this RT-PCR primer
 XX
 SQ Sequence 20 BP; 6 A; 8 C; 3 G; 3 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.8; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 1e+03; 2; Indels 0; Gaps 0;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 373 GATGGCCTGTGAGTT 389
 |||||
 Db 20 GATGACCTGTGAGTT 4
 |||||
 RESULT 1008
 AAH48584
 ID AAH48584 standard; DNA; 20 BP.
 XX
 AC AAH48584;
 XX
 DT 20-SEP-2001 (first entry)
 XX
 DE Human fascin associated primer SEQ ID 36.
 XX
 KW Fascin; regulatory sequence; human; dendritic cell; antiviral; tumor;
 KW antibacterial; antifungal; antiparasitic; anti-allergic; neurological;
 KW immunomodulatory; apoptotic; expression regulator; vaccine; allergen;
 KW Creutzfeld-Jakob disease; Alzheimer's disease; gene therapy;
 KW autoimmune disease; transplant rejection; primer; ss.
 XX
 OS Homo sapiens.
 XX
 FN WO200151631-A2.
 XX
 PD 19-JUL-2001.
 XX
 PF 12-JAN-2001; 2001WO-EP000362.
 XX
 PR 13-JAN-2000; 2000DE-01001169.
 PR 02-MAR-2000; 2000DE-01010188.
 XX
 PA (RESK/) RESKE-KUNZ A.
 PA (ROSS/) ROSS X.
 PA (ROSS/) ROSS R.
 PA (BROS/) BROS M.
 XX
 PI Reske-Kunz A, Ross X, Ross R, Bros M;
 XX
 DR WPI; 2001-451858/48.
 XX
 PT New regulatory sequences from the fascin gene, useful for providing
 PT dendritic cell-specific expression of e.g. antigens, e.g. for vaccination
 PT against tumors and infections.
 XX
 PS Claim 1b; Page 105; 117pp; German.
 XX
 CC This invention describes novel regulatory sequences (A) derived from
 CC human fascin that provide specific expression in dendritic cells (DC) and
 CC which have antiviral, antibacterial, antifungal, antiparasitic, anti-
 CC allergic, neurological, immunomodulatory and apoptotic activity. (A) are
 CC used to regulate expression of antigens, immunoregulators, antisense
 CC sequences etc. in DC-specific fashion. Recombinant DNA, vectors and host
 CC cells that contain (A) are useful: (i) in vaccines against viruses, and
 CC bacteria, fungi, parasites, tumors, allergens and plaques in Creutzfeld-
 CC Jakob and Alzheimer's disease; and (ii) for gene therapy of tumors,
 CC allergies, infections, autoimmune diseases and transplant rejection. They
 CC can also be provide specific expression of antigens and immunoregulators
 CC in DC; for isolation and identification of cell factors and cis-elements
 CC from regulatory sequences that mediate DC-specific expression; to
 CC determine the degree of maturity of DC and to block transcription
 CC factors, by providing binding sites in DC. (A) provide DC-specific
 CC expression of nucleic acid under their control, allowing a more specific

CC regulation of the immune response and eliminating the long and laborious
 CC purification of DC (since a complete leucocyte population may be
 CC transformed), including transformation in vitro. This sequence represents
 CC a primer associated with the human fascin gene described in the invention
 XX
 SQ Sequence 20 BP; 7 A; 2 C; 6 G; 5 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.8; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 1e+03; 2; Indels 0; Gaps 0;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1842 AACATTCTAGAGGGGT 1858
 |||||
 Db 1 AAGCTTCTAGAGGGGT 17
 |||||
 RESULT 1009
 AAF84817/C
 ID AAF84817 standard; cDNA; 20 BP.
 XX
 AC AAF84817;
 XX
 DT 09-JUL-2001 (first entry)
 XX
 DE PCR primer used for RACE-PCR reactions of human SPG4 cDNA.
 XX
 KW Human; SPG4 gene; spastin; PSP-AD; gene therapy; probe;
 KW autosomal dominant familial spastic paraplegia; PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 FN FR2798138-A1.
 XX
 PD 09-MAR-2001.
 XX
 PF 03-SEP-1999; 99FR-00011097.
 XX
 PR 03-SEP-1999; 99FR-00011097.
 XX
 PA (CNRS) CNRS CENT NAT RECH SCI.
 XX
 PI Weissenbach J, Hazan J;
 XX
 DR WPI; 2001-283966/30.
 XX
 PT New human nucleic acid from the SPG4 gene, useful e.g. for diagnosis of
 PT autosomal dominant familial spastic paraplegia and in drug screening.
 XX
 PS Claim 5; Page 24; 145pp; French.
 XX
 CC PCR primers AAF84802-27 were used in RACE-PCR reactions of human SPG4
 CC gene cDNA. The primers may also be used as probes. The SPG4 gene encodes
 CC a spastin polypeptide. Mutations in the SPG4 gene are responsible for
 CC autosomal dominant familial spastic paraplegia. SPG4 polynucleotides, and
 CC their fragments, are used to screen DNA banks for sequences that encode
 CC spastin (particularly sequences in other mammals, specifically mice); to
 CC identify SPG4 mutations, or other genetic anomalies, particularly for
 CC diagnosis of autosomal dominant familial spastic paraplegia (PSP-AD); to
 CC identify promoters and other regulatory elements of the SPG4 gene; for
 CC detection and amplification; for recombinant production of spastin; and
 CC for diagnostic genotyping of PSP-AD
 XX
 SQ Sequence 20 BP; 6 A; 6 C; 4 G; 4 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.8; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 1e+03; 2; Indels 0; Gaps 0;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 367 GTATTGATGCGCTGTT 383
 |||||
 Db 17 GTACTCGAAGGCGCTGTT 1
 |||||

[illegible]

XX
DT 24-OCT-2001 (first entry)
DE Human COL9A2 PCR primer 1 for Exon 15.
XX
XX Human; collagen: COL1A1; COL1A2; COL9A1; COL9A2; COL9A3; ss;
KW osteoporosis; multiple epiphyseal dysplasia; osteogenesis imperfecta;
KW shortness of stature; low bone density; gene therapy; PCR primer.
XX
XX Homo sapiens.
XX US6265157-B1.
XX 24-JUL-2001.
XX 03-OCT-1997; 97US-00943731.
XX 03-DEC-1991; 91US-00803628.
PR 13-MAR-1994; 94US-00212322.
XX (UYAL-) UNIV ALLEGHENY HEALTH SCI.
PA (UYJE-) UNIV JEFFERSON THOMAS.
PA (UYOU-) UNIV OULU.
XX Prockop DJ, Spotila LD, Deltas CD, Sereda L;
PI Westerhausen Larson A, Pack M, Colige A, Early J, Koerkhoe J;
PI Ala-Kokko L, Annunen S, Pihlajamaa T, Vuoristo M, Paasilta P;
XX WPI; 2001-432201/46.
XX Detecting collagen gene alteration, useful for diagnosing osteoporosis,
PT multiple epiphyseal dysplasia, osteogenesis imperfecta, shortness of
PT stature and low bone density in humans.
XX
XX Claim 8; Fig 24; 617pp; English.
XX
XX The invention relates to detecting a collagen gene alteration associated
CC with a pathological condition in a human subject by obtaining from the
CC subject a sample nucleic acid containing a portion of at least 15
CC consecutive nucleotides of the segment of the COL1A1 gene extending in
CC the 5' to 3' direction from 78 nucleotides of intron 27 located adjacent
CC exon 28 through the 3' end of intron 51, where the portion contains an
CC intronic nucleotide and a first and second site, determining the sequence
CC of the portion and comparing the sequence of the portion with the
CC corresponding consensus sequence of the COL1A1 gene where a difference
CC between the sequence of the portion and the consensus sequence indicates
CC the presence of the collagen alteration in the subject. The method is
CC used for detecting abnormalities in a COL1 or COL9 gene is useful for
CC determining whether a subject is afflicted with pathological conditions
CC associated with an altered collagen gene such as osteoporosis, multiple
CC epiphyseal dysplasia, osteogenesis imperfecta, shortness of stature and
CC low bone density. Identification of an abnormality in a collagen gene is
CC also useful for designing a therapeutic nucleotide or gene therapy agent
CC which can be administered to the subject to correct or alleviate the
CC abnormality. The method is useful for detecting mutations in both the
CC coding and non-coding sequences of any of the COL1 or COL9 genes.
CC Therefore the method can be used to detect collagen gene alterations
CC which affect either the primary sequence of a collagen protein chain,
CC splicing of the mRNA encoding such chains or regulation of expression of
CC the genes encoding such chains. The present sequence is a PCR primer
CC which amplifies a nucleic acid from a collagen gene of the invention
XX
XX Sequence 20 BP; 2 A; 7 C; 5 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1685 CTTCCAGGAGGCACCTT 1701
Db 1 CTTCCAGGAGGCCTT 17
|||||

RESULT 1013
ABK10390
ID ABK10390 standard; DNA; 20 BP.
XX
XX AC ABK10390;
XX
DT 21-MAY-2002 (first entry)
XX
DE Rat Vascular cell adhesion molecule-1 RT-PCR primer #1.
XX
XX Vascular inflammation; cardiac tissue damage; inflammatory response;
KW inflammation-related disorder; trauma induced inflammation;
KW surgically induced inflammation; bacterial induced inflammation;
KW viral induced inflammation; cardiovascular disorder; atherosclerosis;
KW coronary artery disease; aneurysm; arteriosclerosis; angina;
KW myocardial infarction; embolism; stroke; thrombosis; Kawasaki disease;
KW vascular plaque inflammation; vascular plaque rupture; calcification;
KW vascular calcification; valvar calcification; PCR; primer; ss;
XX aldosterone blocker.
XX Rattus sp.
XX W0200209683-A2.
XX
XX 07-FEB-2002.
XX
XX 26-JUL-2001; 2001WO-US023520.
XX
XX 27-JUL-2000; 2000US-0221358P.
PR 12-JAN-2001; 2001US-0261352P.
XX (PHAA) PHARMACIA CORP.
XX
XX Rocha R, Zack MD, McMahon EG;
XX WPI; 2002-195909/25.
XX
XX Treating or preventing an inflammation-related disorder e.g. coronary
PT artery disease, aneurysm, arteriosclerosis and myocardial infarction,
PT comprises treatment with an aldosterone blocker.
XX
XX Example 18; Page 112; 210pp; English.
XX
XX The invention relates to treating or preventing an inflammation-related
CC disorder comprises treatment with an aldosterone blocker or its salts.
CC Rats were treated with aldosterone in the presence of salt to induce
CC vascular inflammation and cardiac tissue damage. The damage induced by
CC the treatment was preceded by an inflammatory response characterised by
CC upregulation of proinflammatory molecules. Administration of eplerenone
CC markedly attenuated this initial vascular inflammatory response and
CC subsequent myocardial infarction. The aldosterone blocker is used for
CC treating or preventing inflammation-related disorders (occurring in
CC tissue or organs), such as trauma induced inflammation, surgically
CC induced inflammation, bacterial induced inflammation or viral induced
CC inflammation, e.g. cardiovascular disorders (e.g. coronary artery
CC disease, aneurysm, arteriosclerosis, atherosclerosis, myocardial
CC infarction, embolism, stroke, thrombosis, angina, vascular plaque
CC inflammation, vascular plaque rupture, Kawasaki disease, calcification
CC (e.g. vascular calcification and valvar calcification) and inflammation)
CC or cardiovascular disorder which occurs in whole or in part in the
CC kidney, brain or heart. The present sequence is an RT-PCR (reverse
CC transcriptase PCR) primer for a rat gene encoding a molecule involved in
CC regulation of inflammation whose expression may be altered by
CC administration of an aldosterone blocker
XX
XX Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 787 AACCGGTCATGTCGAA 803
|||||

XX PR 01-SEP-2000; 2000US-0229790P.
XX PA (YANG/) YANG Y Y.
XX PA (BREN/) BRENTANO S T.
XX PA (BABO/) BABOLA O.
XX PA (TRAN/) TRAN N.
XX PA (VERN/) VERNET G.
XX PI Yang YY, Brentano ST, Babola O, Tran N, Vernet G;
XX DR WPI; 2002-462902/49.
XX PT New nucleic acid oligomers for amplifying a nucleotide sequence from HIV-
XX PT 1 and probes for detecting the amplified product are specific for gag and
XX PT pol regions and are useful to detect different subtypes of HIV-1.
XX PS Claim 1; Page 29; 37pp; English.
XX CC This invention relates to a series of nucleic acid oligomers for
XX CC amplifying and detecting a nucleotide sequence of human immunodeficiency
XX CC virus type 1 (HIV-1). The invention also comprises a labeled
XX CC oligonucleotide that specifically hybridizes to an HIV-1 sequence derived
XX CC from gag or pol sequences, having one of the sequences fully defined in
XX CC the specification, and a method for detecting HIV-1 in a biological
XX CC sample, comprising mixing the sample with two or more of the
XX CC amplification oligomers that specifically amplify at least one HIV-1
XX CC target sequence within gag and a pol sequence which is a protease or
XX CC reverse transcriptase sequence, amplifying the target, and detecting the
XX CC amplified product. The oligonucleotides of the invention may be used to
XX CC diagnose HIV-1 infection. The presents sequence represents a PCR primer
XX CC used to amplify the HIV-1 protease gene in the HIV detection method of
XX CC the invention. (Updated on 29-AUG-2003 to standardise OS field)
XX SQ Sequence 20 BP; 10 A; 3 C; 6 G; 1 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03; 2; Indels 0; Gaps 0;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 140 AAGGCCACCAATGAAG 156
DB 2 AAGGACCAATGAAG 18
RESULT 1017
ABQ65271/c
ID ABQ65271 standard; DNA; 20 BP.
XX AC ABQ65271;
XX DT 20-AUG-2002 (first entry)
XX DE Human gene methylation status determination method PCR primer #11.
XX XX Toxicological diagnosis; DNA methylation; methylation status;
KW toxic response; human; PCR; primer; ss.
XX OS Homo sapiens.
XX XX WO200240710-A2.
XX PD 23-MAY-2002.
XX PF 08-NOV-2001; 2001WO-EP012951.
XX PR 14-NOV-2000; 2000DE-01056802.
XX PA (EPIG-) EPIGENOMICS AG.
XX PI Olek A, Piepenbrock C, Berlin K;
XX WPI; 2002-463571/49.

XX PT Toxicological diagnosis, useful for diagnosis and prognosis of adverse
XX PT reactions, based on effect of test compounds on methylation status of
XX PT selected genes, involves determining changes in DNA methylation status.
XX PS Example 2; Page 102; 113pp; German.
XX CC The present invention relates to a method of toxicological diagnosis,
XX CC involving taking a DNA-containing sample from an organism or cell culture
XX CC that has been treated with a test compound and determining any changes in
XX CC the DNA methylation status or pattern caused by said test compound. The
XX CC method is used for diagnosis and prognosis of adverse toxic responses in
XX CC individuals. The present sequence is a PCR primer used to demonstrate the
XX CC method of the invention
XX SQ Sequence 20 BP; 8 A; 0 C; 7 G; 5 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03; 2; Indels 0; Gaps 0;
Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 95 TCTGTTACTACTACGAC 111
DB 20 TCTCTTACTACTACTAC 4
RESULT 1018
AAD47241
ID AAD47241 standard; DNA; 20 BP.
XX AC AAD47241;
XX DT 24-FEB-2003 (first entry)
XX DE Human RLP gene-specific PCR primer #1.
XX KW Human; REG-like protein; RLP; tumour; cancer; therapy; PCR; primer; ss.
XX OS Homo sapiens.
XX PN EP1241269-A2.
XX PD 18-SEP-2002.
XX PF 15-MAR-2002; 2002EP-00251876.
XX PR 16-MAR-2001; 2001US-0276414P.
XX PA (ORTH) ORTHO CLINICAL DIAGNOSTICS INC.
XX PI Heiskala M;
XX WPI; 2002-684095/74.
XX PT Detecting the presence of a tumor comprises detecting the concentration
XX PT of a Reg like Protein or the presence or quantity of a nucleic acid
XX PT encoding it.
XX PS Claim 7; Page 8; 26pp; English.
XX CC The invention relates to a method for detecting REG-like protein (RLP)
XX CC and its nucleic acid sequence. The method is useful for detecting the
XX CC presence of a tumour. Kits comprising an antibody specific for RLP and a
XX CC reagents for detecting the antibody, or a nucleic acid complementary to a
XX CC portion of a nucleic acid encoding RLP, are useful for identifying the
XX CC presence of cancer, characterise the cancer, or monitor the course of
XX CC treatment of cancer. The present sequence is a PCR primer used for
XX CC amplifying human RLP gene. This sequence is used to illustrate the
XX CC method of the invention
XX SQ Sequence 20 BP; 2 A; 5 C; 7 G; 6 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 20;

```

Best Local Similarity 88.2%; Pred. No. 1e+03; Mismatches 2; Indels 0; Gaps 0;
Matches 15; Conservative 0;

QY 1010 CAGCTGTGGCCTGGAT 1026
    |||||
Db 1 CAGCTGTGGCCTGGAT 17

RESULT 1019
AAD36606/c
ID AAD36606 standard; DNA; 20 BP.
XX AAD36606;
AC
XX
XX 09-AUG-2002 (first entry)
XX
XX Human Her-1 antisense oligonucleotide ISIS #128468.
XX
XX Human; epidermal growth factor receptor; hyperproliferative disease;
KW Her1; antisense; prophylaxis; psoriasis; phosphorothioate backbone;
KW tumour; cancer; ss.
XX
XX Homo sapiens.
OS
XX Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone"
FT modified_base 1..5
FT /*tag= b
FT /mod_base= OTHER
FT modified_base 9
FT /note= "2'methoxyethyl nucleotides"
FT /*tag= d
FT /mod_base= m5c
FT modified_base 10
FT /*tag= e
FT /mod_base= m5c
FT modified_base 15..20
FT /*tag= c
FT /mod_base= OTHER
FT modified_base 16
FT /*tag= f
FT /mod_base= m5c
FT modified_base 17
FT /*tag= g
FT /mod_base= m5c
FT modified_base 18
FT /*tag= h
FT /mod_base= m5c
XX
XX WO200226758-A1.
XX
XX 04-APR-2002.
XX
XX 28-SEP-2001; 2001WO-US030551.
XX
XX 29-SEP-2000; 2000US-00676610.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Bennett CP, Wyatt JR, Freier SM;
XX
XX WPI; 2002-394234/42.
XX
XX Novel antisense oligonucleotide that specifically hybridizes with and
PT inhibits nucleic acid encoding epidermal growth factor receptor, useful
PT for treating hyperproliferative disease such as cancer or psoriasis.
XX
XX Claim 1; Page 46; 169pp; English.

```

```

XX The invention relates to an antisense oligonucleotide targetted to a
CC nucleic acid molecule encoding human epidermal growth factor receptor
CC (Her1) to inhibit its expression. The antisense compounds are useful for
CC treating diseases or conditions associated with Her-1 such as
CC hyperproliferative diseases especially cancer (lung, ovarian, colon or
CC prostate cancer) and psoriasis. They are also useful as research
CC reagents, diagnostics, therapeutics, kits and prophylactically e.g. to
CC prevent or delay tumour formation. The present sequence is an antisense
CC oligonucleotide targetted to human Her-1
XX
SQ Sequence 20 BP; 7 A; 5 C; 2 G; 6 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 113 GGGATGTTGGAATTAC 129
    |||||
Db 18 GGGATTTGGAAATTAC 2

RESULT 1020
AAD40841/c
ID AAD40841 standard; DNA; 20 BP.
XX AAD40841;
AC
XX
XX 30-OCT-2002 (first entry)
XX
XX Human hepsin antisense oligonucleotide, ISIS 107115.
XX
XX Human; hepsin; antisense compound; antisense therapy; antisense;
KW phosphorothioate backbone; ss.
XX
XX Homo sapiens.
OS
XX Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone"
FT modified_base 1..5
FT /*tag= b
FT /mod_base= OTHER
FT modified_base 1
FT /*tag= d
FT /mod_base= m5c
FT modified_base 2
FT /*tag= e
FT /mod_base= m5c
FT modified_base 5
FT /*tag= f
FT /mod_base= m5c
FT modified_base 6
FT /*tag= g
FT /mod_base= m5c
FT modified_base 8
FT /*tag= h
FT /mod_base= m5c
FT modified_base 9
FT /*tag= i
FT /mod_base= m5c
FT modified_base 12
FT /*tag= j
FT /mod_base= m5c
FT modified_base 15
FT /*tag= k
FT /mod_base= m5c
FT modified_base 16..20
FT /*tag= c

```

FT /mod_base= OTHER
 FT /note= "2-methoxyethyl nucleotides"
 FT 17
 FT modified_base
 FT /*tag= 1
 FT /mod_base= m5c
 FT 18
 FT modified_base
 FT /*tag= m
 FT /mod_base= m5c
 FT 19
 FT WO200250247-A2.
 FT 20
 FT 27-JUN-2002.
 FT 21
 FT 14-DEC-2001; 2001WO-US048341.
 FT 22
 FT 20-DEC-2000; 2000US-00742482.
 FT 23
 FT (ISIS-) ISIS PHARM INC.
 FT 24
 FT Cowser LM;
 FT 25
 FT WPI; 2002-519882/55.
 FT 26
 FT Novel antisense compound targeted to nucleic acids encoding human hepsin,
 FT useful for inhibiting the expression of hepsin in human cells or tissues,
 FT and for treating humans having a disease associated with human hepsin.
 FT 27
 FT Claim 3; Page 94; 100pp; English.
 FT 28
 FT The invention relates to antisense compounds, compositions and methods
 FT for modulating the expression of hepsin. The compositions comprise
 FT antisense compounds, particularly antisense oligonucleotides, targeted
 FT to nucleic acids encoding hepsin. The antisense compound is useful for
 FT inhibiting the expression of hepsin in human cells or tissues. It is also
 FT useful for treating an animal having a disease or condition associated
 FT with hepsin, by inhibiting expression of hepsin. It is useful for
 FT diagnostics, therapeutics, prophylaxis and as research reagents and kits.
 FT CC It is also used in antisense therapy. The present sequence is an
 FT CC antisense oligonucleotide targeted to human hepsin DNA. This sequence is
 FT CC used in the exemplification of the invention
 FT 29
 FT SQ Sequence 20 BP; 2 A; 11 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 1e+03; 2; Indels 0; Gaps 0;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 64 ATGGCGCAGACGAGGG 80
 DB 20 ATGGCGCAGAGGAGGG 4

RESULT 1021
 AAS97921/c
 ID AAS97921 standard; DNA; 20 BP.

AC AAS97921;
 DT 12-MAR-2002 (first entry)

DE Murine SAC1 gene-specific oligonucleotide PCR primer #474.

XX Human; mouse; SAC1; carbohydrate; sweetener; ethanol; alcoholism; ss;
 KW obesity; diabetes; transgenic embryo; body tissue; body fluid; pancreas;
 KW blood; tongue; PCR primer; anorectic; antidiabetic; gene therapy;
 KW protein replacement therapy.
 XX Mus sp.
 OS WO200183749-A2.
 PN 08-NOV-2001.

PF 25-APR-2001; 2001WO-US013387.
 XX 28-APR-2000; 2000US-0200794P.
 PR 28-JUL-2000; 2000US-0221419P.
 PR 10-NOV-2000; 2000US-0247443P.
 XX (WARN) WARNER LAMBERT CO.
 PA (MONE-) MONELL CHEM SENSES CENT.
 XX Bachmanov AA, Beauchamp GK, Chatterjee A, De Jong PJ, Li S, Li X;
 PI Ohmen JD, Reed DR, Ross D, Tordoff MG;
 XX WPI; 2002-075162/10.
 XX Novel isolated polypeptide comprising variant form of mouse or human SAC1
 PT polypeptide, and is associated with altered preference for carbohydrates
 PT or other sweeteners, useful for preventing obesity, diabetes, alcoholism.
 XX Claim 14; Page 92; 239pp; English.
 XX The invention relates to an isolated polypeptide, comprising a variant
 CC form of mouse or human SAC1 polypeptide. The variant form is associated
 CC with altered preference for carbohydrates, other sweeteners or ethanol.
 CC The polypeptide and its associated DNA sequence can be produced by
 CC recombinant techniques and is useful for preventing obesity, diabetes or
 CC alcoholism associated with SAC1 expression. The sequences are useful in
 CC screening for drugs and sweeteners. Recombinant cell lines and transgenic
 CC embryos may be used in screening for and identifying agents that induce
 CC or repress function of SAC1. Predisposition to diabetes, obesity or
 CC alcoholism can be ascertained by testing any fluid or tissue of a human
 CC (such as blood, pancreas or tongue) for sequence variations of the SAC1
 CC gene. A sequence variation of the SAC1 locus may indicate a
 CC predisposition to diabetes, obesity and/or alcoholism and may provide a
 CC diagnostic mark. The polynucleotide can be detected in a biological
 CC sample by contacting the DNA with a probe to form a hybridisation complex
 CC which is then detected. The sequences represent cDNA encoding human and
 CC mouse SAC1 polypeptides and PCR primers specific for the SAC1 genes
 XX SQ Sequence 20 BP; 7 A; 3 C; 9 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 1e+03; 2; Indels 0; Gaps 0;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1981 CCTCTGTCTGTCCTC 1997
 DB 19 CCTCTGTCTGCCATCTC 3

RESULT 1022
 AAS97430
 ID AAS97430 standard; DNA; 20 BP.

AC AAS97430;
 DT 12-MAR-2002 (first entry)

DE Murine SAC1 gene-specific oligonucleotide PCR primer #35.

XX Human; mouse; SAC1; carbohydrate; sweetener; ethanol; alcoholism; ss;
 KW obesity; diabetes; transgenic embryo; body tissue; body fluid; pancreas;
 KW blood; tongue; PCR primer; anorectic; antidiabetic; gene therapy;
 KW protein replacement therapy.
 XX Mus sp.
 OS WO200183749-A2.
 PN 08-NOV-2001.

XX 25-APR-2001; 2001WO-US013387.
 XX 28-APR-2000; 2000US-0200794P.

```

PR 28-JUL-2000; 2000US-0221419P.
PR 10-NOV-2000; 2000US-0247443P.
XX
PA (WARN ) WARNER LAMBERT CO.
PA (MONE-) MONELL CHEM SENSES CENT.
XX
PI Bachmanov AA, Beauchamp GK, Chatterjee A, De Jong PJ, Li S, Li X;
PI Ohmen JD, Reed DR, Ross D, Tordoff MG;
XX
XX WPI; 2002-075162/10.
XX
XX Novel isolated polypeptide comprising variant form of mouse or human SAC1
XX polypeptide, and is associated with altered preference for carbohydrates
XX or other sweeteners, useful for preventing obesity, diabetes, alcoholism.
XX
PS Claim 14; Page 75; 239pp; English.
XX
XX The invention relates to an isolated polypeptide, comprising a variant
XX form of mouse or human SAC1 polypeptide. The variant form is associated
XX with altered preference for carbohydrates, other sweeteners or ethanol.
XX The polypeptide and its associated DNA sequence can be produced by
XX recombinant techniques and is useful for preventing obesity, diabetes or
XX alcoholism associated with SAC1 expression. The sequences are useful in
XX screening for drugs and sweeteners. Recombinant cell lines and transgenic
XX embryos may be used in screening for and identifying agents that induce
XX or repress function of SAC1. Predisposition to diabetes, obesity or
XX alcoholism can be ascertained by testing any fluid or tissue of a human
XX (such as blood, pancreas or tongue) for sequence variations of the SAC1
XX gene. A sequence variation of the SAC1 locus may indicate a
XX predisposition to diabetes, obesity and/or alcoholism and may provide a
XX diagnostic mark. The polynucleotide can be detected in a biological
XX sample by contacting the DNA with a probe to form a hybridisation complex
XX which is then detected. The sequences represent cDNA encoding human and
XX mouse SAC1 polypeptides and PCR primers specific for the SCAL genes
XX
SQ Sequence 20 BP; 1 A; 9 C; 3 G; 7 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1981 CCTCTGCTGCTCTCTC 1997
DB 2 CCTCTGCTGCCATCTC 18
RESULT 1023
AAS97914
ID AAS97914 standard; DNA; 20 BP.
XX
AC AAS97914;
XX
DT 12-MAR-2002 (first entry)
XX
DE Murine SAC1 gene-specific oligonucleotide PCR primer #467.
XX
KW Human; mouse; SAC1; carbohydrate; sweetener; ethanol; alcoholism; ss;
KW obesity; diabetes; transgenic embryo; body tissue; body fluid; pancreas;
KW blood; tongue; PCR primer; anorectic; antidiabetic; gene therapy;
KW protein replacement therapy.
XX
OS Mus sp.
XX
XX WO200183749-A2.
XX
XX 08-NOV-2001.
XX
XX 25-APR-2001; 2001WO-US013387.
XX
XX 28-APR-2000; 2000US-0200794P.
XX 28-JUL-2000; 2000US-0221419P.
XX 10-NOV-2000; 2000US-0247443P.
XX
PA (WARN ) WARNER LAMBERT CO.
PA (MONE-) MONELL CHEM SENSES CENT.
XX
PI Bachmanov AA, Beauchamp GK, Chatterjee A, De Jong PJ, Li S, Li X;
PI Ohmen JD, Reed DR, Ross D, Tordoff MG;
XX
XX WPI; 2002-075162/10.
XX
XX Novel isolated polypeptide comprising variant form of mouse or human SAC1
XX polypeptide, and is associated with altered preference for carbohydrates
XX or other sweeteners, useful for preventing obesity, diabetes, alcoholism.
XX
PS Claim 14; Page 75; 239pp; English.
XX
XX The invention relates to an isolated polypeptide, comprising a variant
XX form of mouse or human SAC1 polypeptide. The variant form is associated
XX with altered preference for carbohydrates, other sweeteners or ethanol.
XX The polypeptide and its associated DNA sequence can be produced by
XX recombinant techniques and is useful for preventing obesity, diabetes or
XX alcoholism associated with SAC1 expression. The sequences are useful in
XX screening for drugs and sweeteners. Recombinant cell lines and transgenic
XX embryos may be used in screening for and identifying agents that induce
XX or repress function of SAC1. Predisposition to diabetes, obesity or
XX alcoholism can be ascertained by testing any fluid or tissue of a human
XX (such as blood, pancreas or tongue) for sequence variations of the SAC1
XX gene. A sequence variation of the SAC1 locus may indicate a
XX predisposition to diabetes, obesity and/or alcoholism and may provide a
XX diagnostic mark. The polynucleotide can be detected in a biological
XX sample by contacting the DNA with a probe to form a hybridisation complex
XX which is then detected. The sequences represent cDNA encoding human and
XX mouse SAC1 polypeptides and PCR primers specific for the SCAL genes
XX
SQ Sequence 20 BP; 1 A; 9 C; 3 G; 7 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1981 CCTCTGCTGCTCTCTC 1997
DB 2 CCTCTGCTGCCATCTC 18
RESULT 1023
AAS97914
ID AAS97914 standard; DNA; 20 BP.
XX
AC AAS97914;
XX
DT 12-MAR-2002 (first entry)
XX
DE Murine SAC1 gene-specific oligonucleotide PCR primer #467.
XX
KW Human; mouse; SAC1; carbohydrate; sweetener; ethanol; alcoholism; ss;
KW obesity; diabetes; transgenic embryo; body tissue; body fluid; pancreas;
KW blood; tongue; PCR primer; anorectic; antidiabetic; gene therapy;
KW protein replacement therapy.
XX
OS Mus sp.
XX
XX WO200183749-A2.
XX
XX 08-NOV-2001.
XX
XX 25-APR-2001; 2001WO-US013387.
XX
XX 28-APR-2000; 2000US-0200794P.
XX 28-JUL-2000; 2000US-0221419P.
XX 10-NOV-2000; 2000US-0247443P.
XX
PA (WARN ) WARNER LAMBERT CO.
PA (MONE-) MONELL CHEM SENSES CENT.
XX
PI Bachmanov AA, Beauchamp GK, Chatterjee A, De Jong PJ, Li S, Li X;
PI Ohmen JD, Reed DR, Ross D, Tordoff MG;
XX
XX WPI; 2002-075162/10.
XX
XX Novel isolated polypeptide comprising variant form of mouse or human SAC1
XX polypeptide, and is associated with altered preference for carbohydrates
XX or other sweeteners, useful for preventing obesity, diabetes, alcoholism.
XX
PS Claim 14; Page 92; 239pp; English.
XX
XX The invention relates to an isolated polypeptide, comprising a variant
XX form of mouse or human SAC1 polypeptide. The variant form is associated
XX with altered preference for carbohydrates, other sweeteners or ethanol.
XX The polypeptide and its associated DNA sequence can be produced by
XX recombinant techniques and is useful for preventing obesity, diabetes or
XX alcoholism associated with SAC1 expression. The sequences are useful in
XX screening for drugs and sweeteners. Recombinant cell lines and transgenic
XX embryos may be used in screening for and identifying agents that induce
XX or repress function of SAC1. Predisposition to diabetes, obesity or
XX alcoholism can be ascertained by testing any fluid or tissue of a human
XX (such as blood, pancreas or tongue) for sequence variations of the SAC1
XX gene. A sequence variation of the SAC1 locus may indicate a
XX predisposition to diabetes, obesity and/or alcoholism and may provide a
XX diagnostic mark. The polynucleotide can be detected in a biological
XX sample by contacting the DNA with a probe to form a hybridisation complex
XX which is then detected. The sequences represent cDNA encoding human and
XX mouse SAC1 polypeptides and PCR primers specific for the SCAL genes
XX
SQ Sequence 20 BP; 5 A; 8 C; 1 G; 6 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1695 CCACCTTGCCACCCATT 1711
DB 3 CAACCTTGACACCCATT 19
RESULT 1024
ABK34059/C
ID ABK34059 standard; DNA; 20 BP.
XX
XX ABK34059;
XX
DT 18-JUN-2002 (first entry)
XX
DE Human AR PCR primer #1.
XX
KW Human; ss; astrocytoma; cytostatic; staging; cysteine methylation; CpG;
KW bisulphite; brain tissue; MALDI; ESI; electron spray mass spectrometry;
KW matrix assisted laser desorption/ionization mass spectrometry; primer.
XX
OS Homo sapiens.
XX
XX WO200202808-A2.
XX
XX 10-JAN-2002.
XX
XX 02-JUL-2001; 2001WO-EP007538.
XX
XX 30-JUN-2000; 2000DE-01032529.
XX 01-SEP-2000; 2000DE-01043826.
XX
XX (EPIG-) EPIGENOMICS AG.
XX
XX Olek A, Piepenbrock C, Berlin K;
XX
XX WPI; 2002-171649/22.

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Thu Sep 16 13:16:20 2004

schultz167-3.rng

XX Novel chemically modified genomic DNA sequences, useful in the
PT characterization, classification, differentiation, grading, staging,
PT treatment and/or diagnosis of astrocytomas or predisposition to
PT astrocytomas.
XX Example; Page 24; 37pp; English.
XX The invention relates to a nucleic acid comprising a sequence (I) of at
CC least 18 bases in length of a segment of chemically pre-treated genomic
CC DNA which has any one of the sequences of (ABK33919-ABK34032) or its
CC complement. Also included are an oligonucleotide or peptide nucleic acid
CC (or set thereof) of at least 9 nucleotides which hybridises to (I),
CC primers for (II), probes for detecting cytosine methylation or single-
CC nucleotide polymorphisms (SNP) in (I), an array of oligomers or peptide
CC nucleic acids for analysing diseases associated with the methylation
CC states of the CpG dinucleotides of (I). The array is useful for
CC determining genetic and/or epigenetic parameters, classification,
CC differentiation, grading, staging, treatment and/or diagnosis of
CC astrocytomas, or the predisposition to astrocytomas by analysing cytosine
CC methylations, involves obtaining a biological sample containing genomic
CC DNA, extracting the genomic DNA, converting cytosine bases which are
CC unmethylated at the 5-position, in the genomic DNA sample, to uracil or
CC another base which is dissimilar to cytosine in terms of hybridisation
CC behaviour, by chemical treatment and amplifying chemically pre-treated
CC genomic DNA fragments using the array and a polymerase, where the
CC amplificates carry a detectable label. The method further involves
CC identifying methylation status of one or more cytosine positions, and
CC analysing methylation status of the cytosine positions by reference to
CC one or more data sets. The genomic DNA is chemically treated by using a
CC bisulphite, hydrogen sulphite or disulphite. The amplification step
CC amplifies DNA which is of particular interest in astrocytoma or brain
CC tissue, based on the specific genomic methylation status of brain
CC tissues, as opposed to background DNA. The amplificates carry a
CC fluorescent label or radionuclide. Optionally, the labels of the
CC amplificates are detachable molecule fragments having a typical mass
CC which are detected in a mass spectrometer. The fragments of chemically
CC pre-treated genomic DNA to be amplified have a single positive or
CC negative charge for a better detectability in the mass spectrometer.
CC Preferably, the amplificates or fragments of the amplificates are
CC detected by matrix assisted laser desorption/ionization mass spectrometry
CC (MALDI) or using electron spray mass spectrometry (ESI). The present
CC sequence is a PCR primer used to amplify a region containing a methylated
CC cytosine from one of the chemically pre-treated reference DNA samples of
CC the invention. Note: The sequence data for this patent did not form part
CC of the printed specification, but was obtained in electronic format
CC directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX Sequence 20 BP; 8 A; 0 C; 7 G; 5 T; 0 U; 0 Other;
SQ Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 95 TCTGTACTACTACGAC 111
DB 20 TCTCTACTACTACTAC 4
RESULT 1025
AAD40659/c
ID AAD40659 standard; DNA; 20 BP.
XX AAD40659;
AC AAD40659;
XX AAD40659;
DT 30-OCT-2002 (first entry)
XX Human hepsin antisense oligonucleotide, ISIS 107115.
DE Human; antisense; hepsin; inflammation; tumour; gene therapy; cytostatic;
XX Human; antisense; hepsin; inflammation; tumour; gene therapy; cytostatic;
KW phosphorothioate backbone; ss.
XX Homo sapiens.
OS

OS Synthetic.
XX Key
XX modified_base
FT Location/Qualifiers
FT 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone"
FT modified_base
FT 1..5
FT /tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base
FT 1
FT /tag= d
FT /mod_base= m5c
FT modified_base
FT 2
FT /tag= e
FT /mod_base= m5c
FT modified_base
FT 4
FT /tag= f
FT /mod_base= m5c
FT modified_base
FT 5
FT /tag= g
FT /mod_base= m5c
FT modified_base
FT 6
FT /tag= h
FT /mod_base= m5c
FT modified_base
FT 8
FT /tag= i
FT /mod_base= m5c
FT modified_base
FT 9
FT /tag= j
FT /mod_base= m5c
FT modified_base
FT 12
FT /tag= k
FT /mod_base= m5c
FT modified_base
FT 15
FT /tag= l
FT /mod_base= m5c
FT modified_base
FT 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base
FT 17
FT /tag= m
FT /mod_base= m5c
FT modified_base
FT 18
FT /tag= n
FT /mod_base= m5c
XX WO200250248-A2.
PN
XX 27-JUN-2002.
PD
XX 14-DEC-2001; 2001WO-US048431.
PF
XX 20-DEC-2000; 2000US-00742703.
PR
XX (ISIS-) ISIS PHARM INC.
PA (ABBO) ABBOTT LAB.
XX Marcotte PA, Cowseert LM;
PI WPI; 2002-519883/55.
DR
XX New antisense oligonucleotides that modulate (particularly inhibit) human
PT hepsin, useful for treating a disease or condition associated with the
PT expression of hepsin, e.g. inflammation or tumor growth.
XX Example 15; Page 82; 101pp; English.
PS
XX The invention relates to an antisense compound 8-30 nucleobases in length
CC targetted to a nucleic acid molecule encoding human hepsin. The antisense
CC compound specifically hybridises with and inhibits the expression of

CC human hepsin. The antisense compound or the pharmaceutical composition is
 CC useful for treating animals and humans having a disease or condition
 CC associated with the expression of hepsin, e.g. inflammation or tumour
 CC growth. The antisense compounds are useful also for diagnostics,
 CC prophylaxis (e.g. to prevent or delay infection, inflammation or tumour
 CC formation) or as research reagents and kits. The method is useful for
 CC modulating, specifically inhibiting the expression of hepsin which may be
 CC used in research, e.g. to distinguish between functions of various members
 CC of a biological pathway. The invention is used in gene therapy. The
 CC present sequence is human hepsin antisense oligonucleotide
 XX
 SQ Sequence 20 BP; 2 A; 11 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 1e+03; 2; Indels 0; Gaps 0;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 64 ATGGCGCAGACGAGGG 80
 DB 20 ATGGCGCAGAGAGGG 4

RESULT 1026
 ABS67907/c
 ID ABS67907 standard; DNA; 20 BP.
 XX AC ABS67907;
 XX DT 29-NOV-2002 (first entry)
 XX DE Human/mouse casein kinase 2-alpha prime antisense oligonucleotide #58.
 XX KW Human; mouse; casein kinase 2-alpha prime; diabetes mellitus;
 XX KW hyperproliferative disorder; breast cancer; prostate cancer;
 XX KW liver cancer; infection; inflammation; tumour formation; cytostatic;
 XX KW antidiabetic; antiinflammatory; antimicrobial; phosphorothioate;
 XX KW antisense therapy; ss.

XX OS Homo sapiens.
 XX OS Mus musculus.
 XX PN WO200262951-A2.
 XX PD 15-AUG-2002.

XX PF 01-FEB-2002; 2002WO-US002772.
 XX PR 08-FEB-2001; 2001US-00780173.
 XX PA (ISIS-) ISIS PHARM INC.
 XX PI McKay R, Freier SM, Wyatt JR;
 XX DR WPI; 2002-627539/57.
 XX PT New antisense oligonucleotides targeted to nucleic acid encoding casein
 XX kinase 2-alpha prime, useful for diagnosing and/or treating a disease or
 XX condition associated with expression of casein kinase 2-alpha prime.
 XX PS Claim 3; Page 95; 129pp; English.

XX CC The present invention relates to antisense oligonucleotides and methods
 XX for modulating the expression of human or mouse casein kinase 2-alpha
 XX prime. The antisense oligonucleotides are useful for inhibiting the
 XX expression of casein kinase 2-alpha prime, and for treating diseases or
 XX conditions associated with aberrant expression of casein kinase 2-alpha
 XX prime. Such diseases include diabetes mellitus, and hyperproliferative
 XX disorders (particularly cancers e.g. breast cancer, prostate cancer, or
 XX liver cancer). The antisense compounds are also useful for diagnostics,
 XX therapeutics, prophylaxis, e.g. to prevent or delay infection,
 XX inflammation or tumour formation, as research reagents and kits, and in
 XX distinguishing between functions of various members of a biological
 XX pathway. ABS67840-ABS67917 represent human or mouse casein kinase 2-alpha

CC prime antisense oligonucleotides which comprise a phosphorothioate
 CC backbone
 XX
 SQ Sequence 20 BP; 9 A; 5 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 1e+03; 2; Indels 0; Gaps 0;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1527 CTGTGGCTTCCTGCTGA 1543
 DB 17 CTGTGGCTTCCTGCTGA 1

RESULT 1027
 ABK31546/c
 ID ABK31546 standard; DNA; 20 BP.
 XX AC ABK31546;
 XX DT 23-APR-2002 (first entry)

XX DE PCR primer #1 for amplifying signal transduction associated gene, AR.
 XX KW Human; signal transduction associated gene; cytosine methylation state;
 XX KW CpG island; signal transduction associated disease; solid tumour; cancer;
 XX KW antitumour; cytostatic; PCR; primer; AR; ss.

XX OS Homo sapiens.
 XX PN WO200200926-A2.
 XX PD 03-JAN-2002.

XX PF 29-JUN-2001; 2001WO-EP007472.
 XX PR 30-JUN-2000; 2000DE-01032529.
 XX PR 01-SEP-2000; 2000DE-01043826.
 XX PA (EPIG-) EPIGENOMICS AG.

XX PI Olek A, Piepenbrock C, Berlin K;
 XX DR WPI; 2002-147896/19.
 XX PT Oligonucleotide for diagnosis and therapy of diseases associated with
 XX signal transduction e.g. cancer, comprises chemically modified genomic
 XX sequences of genes associated with signal transduction.

XX PS Example 1; Page 14; 24pp; English.
 XX CC The present invention relates to chemically modified DNA sequences of
 XX signal transduction associated genes. The DNA sequences are chemically
 XX modified using a solution of bisulphite, hydrogen sulphite or disulphite.
 XX Also disclosed are oligonucleotides and/or RNA oligomers for detecting
 XX the cytosine methylation state (CpG islands) of these genes, and a method
 XX for the diagnosis and/or therapy of genetic and epigenetic parameters of
 XX genes associated with signal transduction. The genomic DNA can be
 XX obtained from cells or cellular components which contain DNA, e.g. cell
 XX lines, biopsies, blood, sputum, stool, urine, cerebral-spinal fluid,
 XX tissue embedded in paraffin such as tissue from eyes, intestine, kidney,
 XX brain, heart, prostate, lung, breast or liver, histologic object slides,
 XX and all their possible combinations. The sequences of the invention are
 XX useful for the diagnosis and therapy of diseases associated with signal
 XX transduction e.g. solid tumours and cancer. The present sequence for PCR
 XX primer #1 is used with PCR primer #2 (ABK31547) to amplify the signal
 XX transduction associated gene, AR

XX SQ Sequence 20 BP; 8 A; 0 C; 7 G; 5 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.8; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 1e+03; 2; Indels 0; Gaps 0;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

ABL90915
ID ABL90915 standard; DNA; 20 BP.
XX
AC ABL90915;
XX
DT 27-MAY-2002 (first entry)
XX
DE Human protein kinase C-eta antisense oligonucleotide 21.
XX
KW Human; PKC antisense oligonucleotide; protein kinase C; PKC; PKC-alpha;
KW PKC-beta type I; PKC-beta type II; PKC-gamma; PKC-delta; PKC-epsilon;
KW PKC-zeta; PKC-eta; PKC expression modulation; ss;
KW hyperproliferative condition; tumour; glioblastoma; bladder cancer;
KW breast cancer; colon cancer; lung cancer; inflammatory condition;
KW psoriasis; phosphorothioate backbone.
XX
OS Homo sapiens.
XX
PN US6339066-B1.
XX
PD 15-JAN-2002.
XX
PF 31-MAR-1997; 97US-00829637.
XX
PR 11-JAN-1990; 90US-00463358.
PR 13-AUG-1990; 90US-00566977.
PR 11-JAN-1991; 91WO-US000243.
PR 15-OCT-1991; 91US-00777760.
PR 16-OCT-1991; 91US-00777007.
PR 16-MAR-1992; 92US-00852852.
PR 05-MAY-1993; 93US-00058023.
PR 09-JUL-1993; 93US-00089996.
PR 29-AUG-1994; 94US-00297703.
PR 07-JUN-1995; 95US-00481066.
XX
FA (ISIS-) ISIS PHARM INC.
XX
PI Bennett CF, Dean NM, Cook PD, Hoke G;
XX
WPI; 2002-215022/27.
XX
DR New antisense oligonucleotide having nucleoside units which specifically
PT binds mRNA encoding human protein kinase C isoform, useful for treating
PT hyperproliferative and inflammatory diseases e.g. psoriasis, tumor and
PT cancer.
XX
PS Claim 10; Col 46; 77pp; English.
XX
CC The invention comprises antisense oligonucleotides designed to bind mRNA
CC encoding a human protein kinase C (PKC) isoform (i.e. PKC-alpha, PKC-beta
CC type I, PKC-beta type II, PKC-gamma, PKC-delta, PKC-epsilon, PKC-zeta,
CC and PKC-eta). The antisense oligonucleotides of the invention are useful
CC for modulating the expression of the PKC isoforms. The antisense
CC oligonucleotides are useful for treating hyperproliferative conditions
CC (e.g. tumour, glioblastoma, bladder cancer, breast cancer, colon cancer
CC and lung cancer), and inflammatory conditions (e.g. psoriasis). The
CC antisense oligonucleotides of the invention are also useful for detection
CC and diagnosis of PKC expression. The present sequence represents a human
CC PKC antisense oligonucleotide of the invention. NOTE: The present
CC sequence contains a phosphorothioate backbone
XX
SQ Sequence 20 BP; 5 A; 2 C; 9 G; 4 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 946 ATGCTGATGCTGGAGG 962
DB 2 AGGCTGATGCTGGAGG 18
RESULT 1030

95 TCTGTTACTACTACGAC 111
||| ||||| ||||| ||
20 TCTCTACTACTACTAC 4
RESULT 1028
ABN79757
ID ABN79757 standard; DNA; 20 BP.
XX
AC ABN79757;
XX
DT 29-JUL-2002 (first entry)
XX
DE Human Fas target oligonucleotide #72.
XX
KW Human; immunosuppressive; antiinflammatory; hepatotropic; cytostatic;
KW vasotropic; hepatitis; cancer; allograft rejection; ds; Fas.
XX
OS Homo sapiens.
XX
PN US2002004490-A1.
XX
PD 10-JAN-2002.
XX
PR 09-MAR-2001; 2001US-00802669.
XX
PR 12-APR-1999; 99US-00290640.
PR 18-SEP-2000; 2000US-00665615.
XX
FA (DEAN/) DEAN N M.
FA (MARC/) MARCUSSEON E G.
FA (WYATT/) WYATT J.
FA (ZHAN/) ZHANG H.
XX
PI Dean NM, Marcusson EG, Wyatt J, Zhang H;
XX
WPI; 2002-204886/26.
XX
DR Novel antisense compound targeted to nucleic acid encoding Fas, Fas
PT ligand or Fas associated protein-1 is useful for inhibiting expression of
PT Fas, Fas ligand, or Fap-1 in cells or tissues, and for treating
PT hepatitis.
XX
PS Example 18; Page 24; 84pp; English.
XX
CC This invention relates to an antisense compound encoding Fas, Fas ligand,
CC or Fas associated protein-1 (Fap-1). The inhibition of Fas mediated
CC signalling is thought to be immunosuppressive, antiinflammatory,
CC hepatotropic, cytostatic and vasotropic. Antisense oligonucleotides were
CC designed to target human Fas. Oligonucleotides were synthesised as
CC chimeric oligonucleotides and are useful for treating an animal having an
CC autoimmune or inflammatory disease e.g., hepatitis, cancer, a condition
CC associated with apoptosis, allograft rejection, or ischemia reperfusion
CC injury. Optionally, the above mentioned conditions are prevented by
CC contacting the allograft with the antisense oligonucleotide. The
CC oligonucleotides are used in diagnostics, therapeutics, prophylaxis and
CC as research reagents and in kits. The oligonucleotides are also useful
CC for research purposes. The present nucleotide sequence is related to
CC human Fas
XX
SQ Sequence 20 BP; 9 A; 3 C; 2 G; 6 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 2065 CTCCTTGTAAATAAATG 2081
DB 4 CTCATGAATAAATAATG 20
RESULT 1029

The invention relates to antisense compounds, compositions and methods

CC for modulating the expression of calreticulin. The compositions comprise
CC antisense compounds, particularly antisense oligonucleotides, targeted
CC to nucleic acids encoding calreticulin. The antisense compound is useful
CC for inhibiting the expression of calreticulin in human cells or tissues.
CC It is also useful for treating a human having a disease or condition
CC associated with calreticulin, e.g., hyperproliferative disorder e.g.
CC cancer, autoimmune disease, viral infection or cardiovascular disease, by
CC inhibiting expression of calreticulin. It is useful for diagnostics,
CC therapeutics, prophylaxis and as research reagents and kits. It is also
CC used in antisense therapy. The present sequence is an antisense compound
CC targeted to human calreticulin. This sequence is used to study the
CC antisense inhibition of calreticulin expression-phosphorothioate 2'-MOE
CC gapmer oligonucleotides
XX
SQ Sequence 20 BP; 3 A; 7 C; 1 G; 9 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1246 GATGAGGACGACGACGA 1262
Db 18 GATGAGGACGACGACGATGA 2
RESULT 1032
ABK70773/c
ID ABK70773 standard; DNA; 20 BP.
XX
AC ABK70773;
XX
DT 15-JUL-2002 (first entry)
XX
DE Human TSP1 domain containing gene sequencing primer KY01-S06.
XX
KW TSP1; thrombospondin domain; DNA sequencing; primer; ss; FG06969;
KW FG01896; angiogenesis; vasculogenesis.
XX
OS Homo sapiens.
XX
PN JP2002085059-A.
XX
PD 26-MAR-2002.
XX
PF 08-SEP-2000; 2000JP-00273778.
XX
PR 08-SEP-2000; 2000JP-00273778.
XX
PA (KAZU-) ZH KAZUSA DNA KENKYUSHO.
XX
PI (YOSH) YOSHITOMI PHARM IND KK.
XX
DR WPI; 2002-378268/41.
XX
PT TSP1 domain-containing polypeptide useful for drug compositions.
XX
PS Example 2; Page 15; 51pp; Japanese.
XX
CC The invention relates to a TSP1 (thrombospondin 1) domain-containing
CC polypeptide comprising the proteins appearing as AAU80188 and AAU80189,
CC encoded by cDNAs designated FG06969 and FG01896. Also included are
CC proteins that are 50% homologous to the proteins and a polypeptide having
CC at least one deletion, replacement, addition or insertion of amino acid
CC in the proteins and having at least 8 repetitions of the TSP1 domain. The
CC polypeptide can be used in drug compositions particularly for disorders
CC associated with angiogenesis and vasculogenesis. The present sequence is
CC a sequencing primer for the cDNAs of the invention
XX
SQ Sequence 20 BP; 6 A; 8 C; 5 G; 1 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1741 GGTGCAGGCTGCGGTG 1757
Db 20 GCTGCTGCTGCTGCGGTG 4
RESULT 1033
ABS59735
ID ABS59735 standard; DNA; 20 BP.
XX
AC ABS59735;
XX
DT 05-NOV-2002 (first entry)
XX
DE Human damage specific DNA binding protein 1 antisense oligo #27.
XX
KW Antisense; cytostatic; hepatotropic; antiinflammatory; virucide;
KW Damage-specific DNA-binding protein 1; p127; cancer; human; ss;
KW hyperproliferative disorder; haematopoietic cancer; hepatitis.
XX
OS Homo sapiens.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20 /*tag= a
FT /*mod_base= m5c
FT /*note= "All cytosines are 5-methyl cytosine"
FT modified_base 1..20 /*tag= c
FT /*mod_base= OTHER
FT /*note= "OTHER= phosphorothioate backbone"
FT modified_base 1..5 /*tag= b
FT /*mod_base= OTHER
FT /*note= "OTHER= 2'-O-methoxyethyl nucleotide"
FT modified_base 16..20 /*tag= d
FT /*mod_base= OTHER
FT /*note= "OTHER= 2'-O-methoxyethyl nucleotide"
XX
PN WO200246206-A1.
XX
PD 13-JUN-2002.
XX
PF 04-DEC-2001; 2001WO-US046485.
XX
PR 06-DEC-2000; 2000US-00731457.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Popoff I, Wyatt JR;
XX
DR WPI; 2002-599454/64.
XX
PT Novel antisense compound targeted to nucleic acid molecule encoding
PT Damage-specific DNA-binding protein 1, p127, useful for treating animal
PT having disease associated with the protein such as liver cancer, or
PT hepatitis.
XX
PS Page 90; Claim 3; 121pp; English.
XX
CC This invention relates to a novel antisense compound 8 to 50 nucleobases
CC in length targeted to nucleic acid molecule encoding damage-specific DNA-
CC binding protein 1, p127 where the antisense compound specifically
CC hybridizes with and inhibits expression of the damage specific DNA
CC binding protein-1 gene. The compounds of the invention may be used in
CC antisense therapy as an inhibitor of expression of damage-specific DNA-
CC binding protein 1, p127. The antisense compounds of the invention are
CC useful for inhibiting the expression of damage specific DNA binding
CC protein 1, p127 in cells or tissues and are also useful for treating an
CC animal having a disease or condition associated with expression of p127,
CC such as a hyperproliferative disorder (e.g., cancer such as breast, skin,
CC liver, or haematopoietic cancer), or hepatitis, by inhibiting the

CC expression of p127. All antisense oligonucleotides of the invention are
CC chimeric oligonucleotides (gappers) 20 nucleotides in length, composed of
CC a central gap region consisting of ten 2'-deoxynucleotides, which are
CC flanked on both sides (5' and 3' directions) by five- nucleotide wings.
CC The wings are composed of 2'-methoxyethyl (2'-MOE) nucleotides. The
CC internucleoside (backbone) linkages are phosphorothioate (P=S) throughout
CC the oligonucleotide and all cytidine residues are 5-methylcytidines. The
CC present sequence represents a damage-specific DNA binding protein 1, p127
CC antisense oligonucleotide of the invention
XX
SQ Sequence 20 BP; 4 A; 7 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1690 AGGAGCCACCTTGCCAC 1706
Db 4 ATGAGCCACGTGCCAC 20
|||||

RESULT 1034
AAI67695
ID AAI67695 standard; DNA; 20 BP.
AC AAI67695;
XX
XX
DT 27-FEB-2002 (first entry)
XX
DE Nestin cDNA amplifying reverse primer.
XX
KW Cell culturing; embryonic stem; ES; central nervous system; nestin;
KW dopaminergic; cholinergic; serotonergic; antiparkinsonian; neurotropic;
KW neuroprotective; anticonvulsant; tranquilizer; vulnerary; neuroleptic;
KW cerebroprotective; cell therapy; gene therapy; CNS; PCR primer; ss.
XX
OS Homo sapiens.
XX
FN WO200183715-A2.
XX
XX 08-NOV-2001.
XX
XX 01-MAY-2001; 2001WO-US014051.
XX
XX 01-MAY-2000; 2000US-0201005P.
XX
XX (USGO) US GOVERNMENT.
XX
XX (LEES/) LEE S.
XX
XX (LUME/) LUMELSKY N.
XX
XX (STUD/) STUDER L.
XX
XX (MCKA/) MCKAY R D G.

PI Lee S, Lumelsky N, Studer L, McKay RDG;
XX
DR WPI; 2002-049345/06.
XX
XX
XX Culturing cells such as neuronal cells for use in treating neurological
XX disorders, comprises generating embryoid bodies from undifferentiated
XX embryonic stem cells, selecting precursor cells, expanding and
XX differentiating them.
XX
XX Example 10; Page 40; 66pp; English.

PS The invention provides a method of culturing cells. The method involves
XX expanding a culture of undifferentiated embryonic stem (ES) cells,
XX generating embryoid bodies (EB), culturing the bodies to select for
XX central nervous system (CNS) precursor cells (PC), culturing PC in an
XX expansion medium comprising a neurologic factor, and differentiating and
XX culturing the expanded PC to form a culture of differentiated neuronal
XX cells. The method is useful for culturing undifferentiated ES cells to
XX form differentiated neuronal cells which are useful for treating a
XX neurological disorder, especially Parkinson's disease in a patient. A
XX gene product such as tyrosine hydroxylase, nerve growth factor (NGF),

CC brain derived neurotrophic factor (BDNF), bFGF, glial derived growth
CC factor (GDNF) NT-3, and NT-4/5 can be introduced into a brain of a
CC subject. The method is useful for culturing dopaminergic, cholinergic and
CC serotonergic neuronal cells. The differentiated neuronal cells are useful
CC for treating neurological disorders such as Huntington's disease,
CC Alzheimer's disease, multiple sclerosis, severe seizure disorders
CC including epilepsy, familial dysautonomia as well as injury or trauma to
CC the nervous system such as neurotoxic injury or disorders of mood and
CC behavior such as addiction and schizophrenia, cerebrovascular disorders
CC such as stroke and CNS disorders resulting from aging. Assays are useful
CC for developing drugs capable of regulating the survival, proliferation or
CC genesis of neuronal cells and to screen for antagonist or agonist of
CC dopamine or serotonin. Cell cultures comprising 50%-85% neurons which
CC comprise 20-40% dopaminergic neurons and 1-3% astrocytes are useful for
CC studying the mechanism of neurotransmitter synthesis and release,
CC particularly for serotonin and dopamine, neuronal cell survival, and the
CC electrophysiochemical properties of differentiated neuronal cells.
CC Sequences AAI67692-721 represent gene-specific PCR primers for CNS and
CC dopaminergic specific regulatory genes, used for examining the
CC developmental progression of ES cells
XX

SQ Sequence 20 BP; 9 A; 5 C; 5 G; 1 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1373 TCAGAAAGCCCAAGAGA 1389
Db 1 TCAGAAAGCCCAAGAGA 17
|||||

RESULT 1035
ABA03693/c
ID ABA03693 standard; DNA; 20 BP.
XX
XX ABA03693;
XX
XX
DT 18-FEB-2002 (first entry)
XX
DE HSV-tk gene PCR primer RTK2.
XX
XX Cytostatic; antitumor; gene therapy; thymidine kinase; tk;
KW splice acceptor site; splice donor site; cell destruction; cytostatic;
KW cancer; herpes simplex virus; HSV; PCR primer; ss.
XX
XX Herpes simplex virus.
XX
XX WO200179502-A2.
XX
XX PD 25-OCT-2001.
XX
XX PF 13-APR-2001; 2001WO-GB001640.
XX
XX PR 13-APR-2000; 2000GB-00008966.
XX
XX (IMCO-) IMPERIAL COLLEGE INNOVATIONS LTD.
XX
XX Apperley JF, Garin MI;
XX
XX WPI; 2002-026030/03.

XX Novel polynucleotide comprising a thymidine kinase coding region encoding
XX thymidine kinase, which does not contain a functional acceptor and/or
XX splice donor site, useful for gene therapy techniques.
XX
XX Example 5; Page 65; 103pp; English.

XX The invention relates to a polynucleotide encoding a thymidine kinase
XX (tk), where the tk coding region does not contain a functional splice
XX acceptor and/or splice donor site. The polynucleotide and the protein
XX that it encodes are useful for destroying cells. The polynucleotide is
XX introducing into the cells, allowing the cells to express tk. The cells

are then contacted with a substantially non-toxic agent which is converted by tk into a toxic agent. The non-toxic agent is ganciclovir, acyclovir, trifluorothymidine, 1-(2-deoxy-2-fluoro-beta-D-arabino furanosyl)-5-iodouracil, ara-A, ara 1, 1-beta-D arabinofuranosyl thymine, 5-ethyl-2'-deoxyuridine, 5-iodo-5'-amino-2'-deoxyuridine, idoxuridine, AIT, AIV, dideoxycytidine, Ara C or bromovinyl deoxyuridine (BVDV). The polynucleotide is also useful for in vivo or ex vivo gene therapy, and for manufacturing a medicament for destroying cells in a patient. The polynucleotide is used to destroy cells that are, or have the potential to become, cancer cells. The polynucleotide does not contain a splice donor and/or splice acceptor site, and so there is no undesirable splicing, which would lead to the production of an aberrant form of the thymidine kinase gene. Thus a greater proportion of transduced target cells correctly express tk. The present sequence is a primer used to examine the presence of the herpes simplex virus (HSV)-tk gene in transduced cells

Sequence 20 BP; 6 A; 6 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03; Indels 0; Gaps 0;
Matches 15; Conservative 0; Mismatches 2;

QY 935 TTAACCTGGCTATGCTG 951
Db 19 TTGACCTGGCTATGCTG 3

RESULT 1036
AAD28643
ID AAD28643 standard; DNA; 20 BP.
AC AAD28643;
XX
DT 07-MAY-2002 (first entry)
XX
DE Human tau gene single nucleotide polymorphism analysing OLA probe #13.
XX
KW Human; tau gene; screening; Parkinson's disease; therapy; chromosome 17;
KW PCR primer; ss.
XX Homo sapiens.
XX
FH Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /mod_base= OTHER
FT /note= "Cy3 labelled guanosine"
XX
PN WO200192576-A1.
XX
XX 06-DEC-2001.
XX
XX 24-MAY-2001; 2001WO-US016940.
XX
XX 26-MAY-2000; 2000US-0208102P.
PR 04-OCT-2000; 2000US-0238078P.
PR 06-APR-2001; 2001US-0281965P.
XX
XX (UYDU-) UNIV DUKE.
XX
XX Vance JM, Pericak-Vance MA, Scott WK, Stajich JM;
PI WPI; 2002-147621/19.
XX
XX Screening a subject for Parkinson's disease or susceptibility to
PT Parkinson's disease, comprises detecting the presence of a functional
PT polymorphism associated with a gene linked to Parkinson's disease.
XX
XX Example 5; Page 36; 72pp; English.
XX
XX The invention relates to a method for screening a subject for Parkinson's
CC disease. The method comprises detecting the presence or absence of a

functional polymorphism associated with a gene linked to Parkinson's disease, where the presence of the functional polymorphism indicates that the subject is afflicted with or at risk of developing Parkinson's disease. The method is useful for screening subjects for Parkinson's disease or susceptibility to Parkinson's disease, and for insuring that appropriate treatments are promptly provided. The methods may also be used diagnostically or prognostically for the identification of CC treatments for treating patients carrying particular markers for CC Parkinson's disease. The present sequence is a OLA probe used for CC analysing human tau gene single nucleotide polymorphism (SNP) used in the CC invention. Tau gene is located on chromosome 17

Sequence 20 BP; 4 A; 1 C; 12 G; 3 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03; Indels 0; Gaps 0;
Matches 15; Conservative 0; Mismatches 2;

QY 37 TGACGGTAGGACGGGA 53
Db 3 TGAGGGTTGGGACGGGA 19

RESULT 1037
AAD25453/C
ID AAD25453 standard; DNA; 20 BP.
XX
AC AAD25453;
XX
DT 29-AUG-2003 (revised)
DT 26-MAR-2002 (first entry)
XX
DE HSV 1-TK gene specific RT-PCR primer, NSTK2.
XX
KW Human papillomavirus; HPV; cytotoxic gene; anogenital SCC; HSV 1; cancer;
KW intraepithelial neoplasia; IN; squamous cell carcinoma; tumour;
KW gene therapy; keratinocyte; Herpes simplex virus 1; TK; thymidine kinase;
KW reverse transcription PCR primer; RT-PCR; ss.
XX
XX Human herpesvirus 1.
OS
XX WO200187350-A2.
PN
XX 22-NOV-2001.
PD
XX 11-MAY-2001; 2001WO-US015407.
PF
XX 12-MAY-2000; 2000US-0203709P.
PR
XX (REGC) UNIV CALIFORNIA.
PA
XX Sethi N, Palefsky J;
PI WPI; 2002-082947/11.
DR
XX
XX Novel gene therapy approach to specifically eliminate keratinocytes or
PT other cells expressing human papilloma virus, involves transfecting cell
PT with a construct encoding HPV specific promoter induced by a HPV protein.
XX
XX Example 1; Page 33; 72pp; English.
PS
XX The invention provides a novel gene therapy approach to specifically
CC eliminate keratinocytes or other cells expressing early human
CC papillomavirus (HPV) and which is minimally toxic to HPV-negative cells.
CC The method involves transfecting a mammalian cell with a nucleic acid
CC construct encoding a HPV specific promoter that is induced by a HPV
CC protein where the promoter is operably linked to a nucleic acid
CC comprising a cytotoxic gene such that the cell, when infected with a HPV,
CC induces expression of the cytotoxic gene resulting in death of the
CC mammalian cell. The method is useful for selectively killing a cancer
CC cell comprising intraepithelial neoplasia (IN), anogenital cancer or a
CC metastatic cell or solid tumour bearing a HPV. The nucleic acid construct
CC comprising HPV promoter operably linked to a reporter gene is useful for

CC selectively labelling a cell bearing HPV. The method is useful for
 CC specifically eliminating keratinocytes, particularly cells of anogenital
 CC squamous cell carcinoma (SCC), or other cells expressing early HPV e.g.
 CC HPV 16 genes and a cell comprising a wart. The present DNA sequence is a
 CC reverse transcription PCR (RT-PCR) primer used to confirm the expression
 CC of Herpes simplex virus 1 (HSV 1)-thymidine kinase (TK) gene. (Updated on
 CC 29-AUG-2003 to standardise OS field)

SQ Sequence 20 BP; 6 A; 6 C; 6 G; 2 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.8; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 1e+03; Length 20;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 935 TTACCTGCTATGCTG 951
 |||||
 DB 19 TTGACCTGGCTATGCTG 3

RESULT 1038
 ABK27997/C
 ID ABK27997 standard; DNA; 20 BP.
 AC ABK27997;
 XX
 DT 09-APR-2002 (first entry)
 XX
 DE Human AR methylation state PCR primer #1.

XX Human; ss; astrocytoma; oligoastrocytoma; oligodendroglioma; antitumour;
 KW cytostatic; cytosine methylation state; single nucleotide polymorphism;
 KW SNP; CpG; brain tumour; PCR; primer.

XX Homo sapiens.

OS WO200200705-A2.

PN 03-JAN-2002.

PD 02-JUL-2001; 2001WO-EP007539.

PF 30-JUN-2000; 2000DE-01032529.

PR 01-SEP-2000; 2000DE-01043826.

XX (EPIG-) EPIGENOMICS AG.

PA Olek A, Piepenbrock C, Berlin K;

PI WPI; 2002-139900/18.

DR Oligonucleotide for diagnosing and treating tumors and cancer especially

PT gliomas, astrocytomas and oligodendromas, comprises chemically modified

PT genomic sequences of genes associated with tumors and cancers.

XX Example 4; Page 20; 31pp; English.

XX The invention relates to a nucleic acid (I) comprising a sequence of at
 CC least 18 bases of a segment of chemically pretreated genomic DNA (II)
 CC according to one of the sequences (S1) selected from 120 sequences, and
 CC its complementary sequences. Also included are an oligomer (III),
 CC especially an oligonucleotide or peptide nucleic acid (PNA)-oligomer,
 CC comprising a sequence of at least 9 nucleotides which hybridises to or is
 CC identical to (II), and complementary sequences, a set of oligomers (IV)
 CC comprising at least two (III) and their use for detecting the cytosine
 CC methylation state and/or single nucleotide polymorphisms (SNPs) in (II),
 CC and manufacturing (MI) an arrangement of different oligomers (array)
 CC fixed to a carrier material for analysing diseases associated with the
 CC methylation state of the CpG dinucleotide of (S1), where at least one
 CC oligomer is coupled to solid phase. The set of oligomers (IV) are useful
 CC as primer oligonucleotides for the amplification of (II) especially for
 CC characterising classifying and differentiating oligodendroglioma,
 CC astrocytoma and oligoastrocytoma tumours (by ascertaining genetic and/or
 CC epigenetic parameters of genomic DNA by analysing cytosine methylation

CC and single nucleotide polymorphisms). The present sequence is a PCR
 CC primer used to amplify the modified genomic sequence from a gene
 CC associated with brain tumours

SQ Sequence 20 BP; 8 A; 0 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 1e+03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 95 TCTGTACTACTACGAC 111
 |||||
 DB 20 TCTGTACTACTACTAC 4

RESULT 1039
 ABA95133
 ID ABA95133 standard; DNA; 20 BP.

AC ABA95133;

XX 20-MAY-2002 (first entry)

DE VCAM-1 gene specific forward primer.

XX Aldosterone; cyclooxygenase-2; cardiovascular; eplerenone; cardiant;
 KW vasotropic; antiarteriosclerotic; cerebroprotective; thrombolytic; rat;
 KW antianginal; antiinflammatory; vulnery; antibacterial; virucide; ss;
 KW nephrotropic; vascular adhesion molecule-1; VCAM-1; PCR primer.

OS Rattus sp.

XX WO200209759-A2.

PN 07-FEB-2002.

PD 26-JUL-2001; 2001WO-US023601.

PF 27-JUL-2000; 2000US-0221364P.

PR 12-JAN-2001; 2001US-0261497P.

XX (PHAA) PHARMACIA CORP.

PI Rocha R, Zack MD, McMahon EG;

XX WPI; 2002-227077/28.

XX Method for treating or preventing inflammation-related cardiovascular
 PT disorders comprises administration of an aldosterone antagonist and
 PT cyclooxygenase-2 inhibitor combination.

PS Example 18; Page 161; 273pp; English.

XX The invention provides a method for treating or preventing an
 CC inflammation-related cardiovascular disorder. The method involves
 CC administration of an aldosterone antagonist and cyclooxygenase-2
 CC inhibitor combination or their salts. The method is used to treat or
 CC prevent inflammation-related cardiovascular disorders in the heart,
 CC kidney and/or brain, e.g. coronary artery disease, aneurysm, embolism,
 CC arteriosclerosis, atherosclerosis, myocardial infarction, thrombosis,
 CC stroke, angina, vascular plaque inflammation, vascular plaque rupture,
 CC Kawasaki disease, vascular or valvar calcification, trauma, surgically-
 CC bacterial- or viral-induced inflammation. The use of eplerenone in
 CC conjunction with the aldosterone receptor antagonist markedly attenuates
 CC the initial vascular inflammatory response and subsequent myocardial
 CC injury. Sequences ABA95106-138 represent TaqMan primers and probes
 CC designed from known sequences of rat genes such as transforming growth
 CC factor beta 1 (TGFbeta1), atrial natriuretic factor (ANP), collagen I and
 CC III, cyclooxygenase-2 (COX-2), osteopontin, monocyte chemoattractant
 CC protein-1 (MCP-1), intercellular adhesion molecule-1 (ICAM-1), vascular
 CC adhesion molecule-1 (VCAM-1) and a reference cyclophilin, used in the
 CC course of the invention

```
SQ Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 787 AAGCCGTCATGTCCTCA 803
Db 2 AAGCCGTCATGTCCTCA 18

RESULT 1040
ID AEN84953 standard; DNA; 20 BP.
AC AEN84953;
XX
XX 25-NOV-2002 (first entry)
DE Nestin gene PCR primer.
XX
XX Multipotent adult stem cell; MASC; cell replacement therapy; cytostatic;
KW cardiant; cardiovascular; hepatotropic; haemostatic; antidiabetic;
KW virucide; antiinflammatory; vasotropic; antianaemic; neuroprotective;
KW cerebroprotective; immunosuppressive; antibacterial; mouse; nestin; PCR;
XX primer; ss.
XX
XX Mus musculus.
XX
XX WO200264748-A2.
XX
XX 22-AUG-2002.
XX
XX 14-FEB-2002; 2002WO-US004652.
XX
XX 14-FEB-2001; 2001US-0268786P.
XX
XX 15-FEB-2001; 2001US-0269062P.
XX
XX 07-AUG-2001; 2001US-0310625P.
XX
XX 25-OCT-2001; 2001US-0343386P.
XX
XX (ANON ) ANONYMOUS.
XX
XX WPI; 2002-667000/71.
XX
XX New multipotent adult stem cells that can be induced to differentiate to
XX form a cell type of mesodermal, ectodermal or endodermal origin, useful
XX for treating e.g. cancer, diabetes, hepatitis, hemophilia, ischemia or
XX inflammation.
XX
XX Example 1; Page 24; 117pp; English.
XX
XX The present sequence is 1 of a primer pair (see also AEN84952) for the
XX nestin gene. PCR was used to examine the expressed gene profile of murine
XX multipotent adult stem cells (mMASC). The invention relates to methods of
XX obtaining, maintaining and differentiating MASC. The MASC are derived
XX from a non-embryonic organ or tissue, such as bone marrow, muscle, brain,
XX umbilical cord blood or placenta, and has the capacity to be induced to
XX differentiate to a cell type of mesodermal, ectodermal or endodermal
XX origin, including osteoblast, chondrocyte, adipocyte, fibroblast, marrow
XX stroma, skeletal muscle, smooth muscle, cardiac muscle, endothelial,
XX epithelial, liver, pancreas, haematopoietic, glial, neuronal or
XX oligodendrocyte cell types. MASC constitutively express oct4 and high
XX levels of telomerase and are negative for CD44, MHC class I and MHC class
XX II expression. Teratomas are not formed when MASC are administered to a
XX patient. MASC or their progeny are particularly useful for treating
XX cancer, cardiovascular disease, metabolic disease, liver disease,
XX diabetes, hepatitis, haemophilia, degenerative or traumatic neurological
XX conditions, autoimmune disease, genetic deficiency, connective tissue
XX disorders, anaemia, infectious disease, transplant rejection, ischaemia
XX or inflammation. Treatment may be directed to abdominal aortic aneurysm,
XX cardiac bypass surgery, peripheral vascular disease, or coronary vascular
XX disease (all claimed)

SQ Sequence 20 BP; 9 A; 5 C; 5 G; 1 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1373 TCAAAAAGCCCAAGAGA 1389
Db 1 TCCAGAAAGCCCAAGAGA 17

RESULT 1041
ID AAL45523 standard; DNA; 20 BP.
XX
XX AAL45523;
AC AAL45523;
XX
XX 29-AUG-2003 (revised)
DT 06-JUN-2002 (first entry)
XX
XX HIV-1 pol gene protease amplification oligomer SEQ ID NO: 61.
DE
XX HIV-1; gag gene; pol gene; PCR; primer; drug resistance; genetic subtype;
KW probe; ss.
XX
XX Human immunodeficiency virus 1.
XX
XX WO200220852-A1.
XX
XX 14-MAR-2002.
XX
XX 01-SEP-2000; 2000WO-US024117.
XX
XX 01-SEP-2000; 2000WO-US024117.
XX
XX (GENP-) GEN-PROBE INC.
XX
XX (INMR ) BIOMERIEUX SA.
XX
XX Yang YV, Brentano ST, Babola O, Tran N, Vernet G;
XX WPI; 2002-292273/33.
XX
XX New nucleic acid oligomer, useful for detecting selected regions of gag
XX and pol genes of human immune deficiency virus, particularly for
XX assessing drug resistance.
XX
XX Claim 1; Page 67; 82pp; English.
XX
XX The present invention provides a number of nucleic acid oligomers which
XX can be used to amplify the gag and pol genes of human immunodeficiency
XX virus type 1 (HIV-1). These are used to detect regions of the gag and pol
XX genes, especially regions associated with drug resistance, and also for
XX identifying genetic subtypes of the virus. The present sequence is an
XX oligomer of the invention. (Updated on 29-AUG-2003 to standardise OS
XX field)
XX
XX Sequence 20 BP; 10 A; 3 C; 6 G; 1 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 140 AAGGCCACCAATGAAG 156
Db 2 AAGGCCACCAATGAAG 18

RESULT 1042
ID ABS64416 standard; DNA; 20 BP.
XX
XX ABS64416;
AC ABS64416;
XX
```

DT XX 15-NOV-2002 (first entry)
DE XX Human NOVX reverse PCR primer Ag575.
XX XX
KW Human; NOVX; neurodegenerative disease; Alzheimer's disease; anxiety;
KW Parkinson's disease; Huntington's disease; neurological disorder;
KW schizophrenia; manic depression; mental retardation; angina pectoris;
KW cardiovascular disease; acute heart failure; myocardial infarction;
KW muscular disease; muscular disorder; retinal disease; photoreception;
KW deafness; keratinisation disorder; cancer; ovarian cancer; melanoma;
KW immunological disorder; inflammatory disease; immune disease; diabetes;
KW bacterial infection; fungal infection; protozoal infection; obesity;
KW viral infection; reproductive system disorder; metabolic disturbance;
KW anorexia; wasting disorder; chronic disease; infectious disease;
KW dyslipidaemia; PCR; primer; ss.
XX XX
OS Homo sapiens.
XX XX
XX W0200264791-A2.
XX XX
PD 22-AUG-2002.
XX XX
XX 10-DEC-2001; 2001WO-US048369.
XX XX
XX 08-DEC-2000; 2000US-0254329P.
PR 14-DEC-2000; 2000US-0255648P.
PR 15-MAY-2001; 2001US-0291037P.
PR 08-JUN-2001; 2001US-0297173P.
PR 08-JUN-2001; 2001US-0309258P.
PR 29-AUG-2001; 2001US-0315639P.
PR 01-OCT-2001; 2001US-0326393P.
XX XX
XX (CURA-) CURAGEN CORP.
PA XX
XX Alsbrook JP, Anderson DW, Burgess CE, Boldog FL, Casman SJ;
PI Colman SD, Edinger SR, Ellerman K, Gerlach V, Gorman L, Grose WM;
PI Guo X, Herrmann JL, Kekuda R, Lepley DW, Li L, Macdougall JR;
PI Millet I, Pena CEA, Peyman JA, Rastelli L, Rieger DK, Shinkets RA;
PI Smithson G, Spytek KA, Stone DJ, Tchernev VT, Vernet CM, Voss EZ;
PI Zerhusen BD, Zhong H, Zhong M;
XX WPI; 2002-643486/69.
XX XX
XX New NOVX polypeptides and polynucleotides useful for treating or
PT preventing e.g. neurodegenerative diseases, neurological disorders,
PT cardiovascular diseases, muscular diseases and disorders, or
PT immunological diseases.
XX XX
PS Example 2; Page 217; 299pp; English.
XX XX
CC The present invention relates to new NOVX polypeptides. The polypeptides,
CC polynucleotides and antibodies are useful in the manufacture of a
CC medicament for treating or preventing neurodegenerative diseases (e.g.
CC Alzheimer's disease, Parkinson's disease, or Huntington's disease),
CC neurological disorders (e.g. anxiety, schizophrenia, manic depression or
CC mental retardation), cardiovascular disease (e.g. acute heart failure,
CC angina pectoris or myocardial infarction), muscular diseases and
CC disorders, retinal diseases (including those involving photoreception,
CC deafness and keratinisation disorders), cancer (e.g. ovarian cancer or
CC melanoma), immunological disorders, inflammatory and immune diseases,
CC bacterial, fungal, protozoal and viral infections, and reproductive
CC system disorders. The proteins of the invention may be used to screen
CC as well as to treat disorders characterised by insufficient or excessive
CC production of NOVX protein or protein forms that have decreased or
CC aberrant activity compared to NOVX wild type protein, such as diabetes,
CC obesity, metabolic disturbances associated with obesity, anorexia and
CC wasting disorders associated with chronic diseases and various cancers,
CC infectious diseases and various dyslipidaemias. The nucleic acid
CC sequences of the invention may be used in chromosome mapping, identifying
CC an individual from minute biological samples (tissue typing), and in
CC forensic identification of a biological sample. The present nucleic acid
CC sequence represents a PCR primer that was used in the methods of the

CC invention for amplification of NOVX genes
XX XX
SQ Sequence 20 BP; 4 A; 9 C; 2 G; 5 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03; Mismatches 0; Gaps 0;
Matches 15; Conservative 0; Indels 2; Indels 0; Gaps 0;
QY 228 CCCTCACAAAGCCCAATG 244
||||||| |||||
Db 4 CCCTCACAAAGCCCAATG 20
RESULT 1043
ABZ89055/C
ID ABZ89055 standard; DNA; 20 BP.
XX AC ABZ89055;
XX AC
XX 17-OCT-2003 (first entry)
XX DE Human oligonucleotide sequence.
XX DE
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX OS Homo sapiens.
XX XX
XX W0200285308-A2.
XX PD
XX 31-OCT-2002.
XX PF
XX 23-APR-2002; 2002WO-US013135.
XX XX
XX 24-APR-2001; 2001US-0286137P.
XX XX
XX (EPIG-) EPIGENESIS PHARM INC.
XX XX
XX MYCE JW, Li Y, Sandrasegna A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shanabuddin S;
XX WPI; 2003-229219/22.
XX XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX PS
XX Disclosure; SEQ ID NO 4297; 872pp; English.
XX XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO

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CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 7 A; 3 C; 6 G; 4 T; 0 U; 0 Other;

Query Match      0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 518 ACGTCAATGATATCGTC 534
Db 17 ACGTCAATGATGCTTC 1

RESULT 1044
ABZ90785
ID ABZ90785 standard; DNA; 20 BP.
XX
AC ABZ90785;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiqunone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiqunone.
XX
PS Disclosure; SEQ ID NO 6027; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiqunone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiqunone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
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CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 6 A; 4 C; 7 G; 3 T; 0 U; 0 Other;

Query Match      0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Oy 770 CCTATGAGGCCATTTC 786
Db 20 CCCAGGAGGCCATTTC 4

RESULT 1046
ABZ92480/C
ID ABZ92480 standard; DNA; 20 BP.
XX
AC ABZ92480;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 7722; 872pp; English.
XX
The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
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CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 7 A; 3 C; 5 G; 5 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.8; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 1e-03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 723 GTATTATGCTGTTAACT 739
 ||||| ||||| |||||
 Db 17 GTATTAGCTGTTCACT 1

RESULT 1048
 ABZ93353
 ID ABZ93353 standard; DNA; 20 BP.
 XX
 AC ABZ93353;
 XX
 DT 17-OCT-2003 (first entry)
 XX
 DE Human oligonucleotide sequence.
 XX
 KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiunone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX
 OS Homo sapiens.
 XX
 PN WO200285308-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013135.
 XX
 PR 24-APR-2001; 2001US-0286137P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-229219/22.
 XX
 PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiunone.
 XX
 PS Disclosure; SEQ ID NO 8595; 872pp; English.
 XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiunone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of ubiunone or
 CC receptor, producing bronchodilation, increasing levels of ubiunone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO

CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.8; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 1e-03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 69 GCAGAGCGAGCGACCC 85
 ||||| ||||| |||||
 Db 2 GCAGAGCGAGGTACCC 18

RESULT 1049
 ABZ84998
 ID ABZ84998 standard; DNA; 20 BP.
 XX
 AC ABZ84998;
 XX
 DT 17-OCT-2003 (first entry)
 XX
 DE Human oligonucleotide sequence.
 XX
 KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiunone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX
 OS Homo sapiens.
 XX
 PN WO200285308-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013135.
 XX
 PR 24-APR-2001; 2001US-0286137P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-229219/22.
 XX
 PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiunone.
 XX
 PS Claim 15; SEQ ID NO 240; 872pp; English.
 XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiunone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of ubiunone or
 CC receptor, producing bronchodilation, increasing levels of ubiunone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO

```
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 4 A; 4 C; 7 G; 5 T; 0 U; 0 Other;

Query Match.          0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 2001 ATTCTGCAGGTGGAGGT 2017
   ||||| ||||| |||||
Db 3 ATTCTCCAGGTAGAGGT 19

RESULT 1050
ABZ93493
ID ABZ93493 standard; DNA; 20 BP.
XX
AC ABZ93493;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
Human; antisense; lung dysfunction; nasal airway dysfunction;
antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
antisthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
antisense gene therapy; respiratory; lung; adenosine sensitivity;
adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
WPI; 2003-229219/22.
XX
Pharmaceutical composition for treating ailments associated with impaired
respiration, has oligo(s) antisense to specific gene(s) or its
corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
ubiquinone.
XX
Disclosure; SEQ ID NO 8735; 872pp; English.
XX
The invention relates to a novel pharmaceutical composition, which has a
first active agent comprising an oligonucleotide antisense to the
initiation codon, coding region, 5' or 3' end genomic flanking regions,
5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
junctions of genes encoding a polypeptide associated with lung and/or
nasal airway dysfunction and a second active agent comprising an
antiinflammatory steroid and ubiquinone. A composition of the invention
has antiinflammatory, antiallergic, antisthmatic, hypotensive,
immunosuppressive, and cytostatic activity. The composition may have a
use in antisense gene therapy. The composition is useful for treating or
preventing a respiratory, lung or malignant disease or condition, also
for enhancing the prophylactic or therapeutic respiratory effect of an
antiinflammatory steroid in a subject, for reducing or depleting levels
of, or reducing sensitivity to adenosine, reducing levels of adenosine
receptor, producing bronchodilation, increasing levels of ubiquinone or
lung surfactant in a subject's tissue, or treating bronchoconstriction,
lung inflammation, lung allergies, or a respiratory disease or condition.
XX
Note: The sequence data for this patent is not represented in the printed
specification, but was obtained in electronic format directly from WIPO
```

CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 6 A; 3 C; 10 G; 1 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1337 AGCAGGAGAGGGGGC 1353
|| ||||| |||||
DB 3 AGCAGGAGAGGGGGC 19
RESULT 1052
ABZ99186/c
ID ABZ99186 standard; DNA; 20 BP.
XX
AC ABZ99186;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human PDB4C oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PY Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 14428; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO

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CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 9 A; 1 C; 1 G; 9 T; 0 U; 0 Other;

Query Match      0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1609 AAAATTATTATAATATA 1625
Db 3 ATAATTATTATAATATA 19
|||||
|

RESULT 1054
ABZ90568/C
ID ABZ90568 standard; DNA; 20 BP.
XX
AC ABZ90568;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiqunone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiqunone.
XX
PS Disclosure; SEQ ID NO 5810; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiqunone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiqunone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
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CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 3 A; 9 C; 6 G; 2 T; 0 U; 0 Other;

Query Match      0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1662 AGGGCAGCTGTGCTGGG 1678
Db 20 AGGGCCCCCTGTGCTGGG 4
|||||
|

RESULT 1055
ABZ93052
ID ABZ93052 standard; DNA; 20 BP.
XX
AC ABZ93052;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiqunone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiqunone.
XX
PS Disclosure; SEQ ID NO 8294; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiqunone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiqunone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
```

CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 10 A; 0 C; 1 G; 9 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.8; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 1e+03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1599 TATTATATAAAATTT 1615
 |||||
 Db 1 TATTATATAAAATTT 17

RESULT 1056
 ABZ93501
 ID ABZ93501 standard; DNA; 20 BP.
 XX
 AC ABZ93501;
 XX
 DT 17-OCT-2003 (first entry)
 XX
 DE Human oligonucleotide sequence.
 XX
 KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiasthmatic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX
 OS Homo sapiens.
 XX
 PN WO200285308-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013135.
 XX
 PR 24-APR-2001; 2001US-0286137P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX
 PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX
 DR WPI; 2003-229219/22.
 XX
 PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubiquinone.
 XX
 PS Disclosure; SEQ ID NO 8743; 872pp; English.
 XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubiquinone. A composition of the invention
 CC has antiinflammatory, antiasthmatic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubiquinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO

CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 6 A; 1 C; 9 G; 4 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.8; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 1e+03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1327 GATTCTGAAGAGGAGG 1343
 |||||
 Db 3 GATTATGAAGAGGTGG 19

RESULT 1057
 ABZ77267
 ID ABZ77267 standard; DNA; 20 BP.
 XX
 AC ABZ77267;
 XX
 DT 28-MAY-2003 (first entry)
 XX
 DE Antisense oligonucleotide for C-reactive protein 3'-UTR.
 XX
 KW Antisense oligonucleotide; C-reactive protein; phosphorothioate;
 KW cardiovascular disease; unstable angina; myocardial infarction; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN WO2003010284-A2.
 XX
 PD 06-FEB-2003.
 XX
 PF 15-JUL-2002; 2002WO-US022656.
 XX
 PR 25-JUL-2001; 2001US-00912724.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Crooke RM, Graham MJ;
 XX
 DR WPI; 2003-239435/23.
 XX
 PT New antisense oligonucleotides, useful for modulating the expression of C
 PT -reactive protein or for treating a disease or condition associated with
 PT the expression of C-reactive protein, e.g. unstable angina or myocardial
 PT infarction.
 XX
 PS Example 15; Page 93; 113pp; English.
 XX
 CC The specification describes antisense oligonucleotides which are
 CC targeting to DNA encoding C-reactive protein. The antisense compounds are
 CC useful for modulating the expression of C-reactive protein, and for
 CC treating a disease or condition associated with expression of C-reactive
 CC protein, e.g. cardiovascular disease, such as unstable angina or
 CC myocardial infarction. ABZ77222-75 represent antisense oligonucleotides
 CC of the invention, directed against human C-reactive protein gene
 XX
 SQ Sequence 20 BP; 9 A; 4 C; 4 G; 3 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.8; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 1e+03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1428 GAAGAAGAGTCTCACG 1444
 |||||
 Db 2 GAAGAAGAGTCTCACG 18

RESULT 1058
 ABV74825/c
 ID ABV74825 standard; DNA; 20 BP.
 XX

AC ABV74825;
 DT 28-MAR-2003 (first entry)
 XX Murine OAS PCR primer SEQ ID 8.
 DE Virucide; hepatotropic; antiinflammatory; antiviral; OAS; murine;
 XX 2'-5'-oligoadenylate synthase; Flavivirus infection; PCR; primer; ss.
 KW Mus sp.
 XX W0200281741-A2.
 XX 17-OCT-2002.
 XX 04-APR-2002; 2002WO-FR001169.
 XX 04-APR-2001; 2001FR-00004598.
 XX (INSP) INST PASTEUR.
 PA (CNRS) CNRS CENT NAT RECH SCI.
 XX Guenet J, Mashimo T, Simon-Chazottes D, Montagutelli X;
 PI Frenkiel M, Despres P, Deubel V, Bonhomme F, Lucas M;
 XX WPI; 2003-058566/05.
 DR Identifying stimulators of oligoadenylate synthase family genes, useful
 XX as antiviral agents against Flavivirus, also mutated genes responsible
 PT for sensitivity to virus.
 PT Claim 16; Page 21; 93pp; French.
 PS The present invention relates to a method for identifying compounds (I)
 CC that can stimulate a gene of the OAS (2'-5'-oligoadenylate synthase)
 CC family. The method comprises: (a) inducing expression of the OAS gene in
 CC a culture of cells from a non-human mammal (Flvr/Flvr or Flvr/Flvs;
 CC indicating resistance or sensitivity to Flavivirus infection); (b)
 CC treating cells with test compound; and (c) measuring activity of OAS gene
 CC relative to a control. (I) are potentially useful as antiviral agents for
 CC treating infections by Flaviviruses (e.g. hepatitis C; dengue; yellow
 CC fever and various forms of encephalitis). Genomic OAS DNA and derived
 CC cDNA, also the encoded proteins, are useful: (a) for treating Flavivirus
 CC infection; (b) in screening for anti-flavivirus agents, and (c) for
 CC evaluating sensitivity of subjects to Flavivirus infection and their
 CC likely response to interferon treatment, e.g. to identify patients at
 CC risk of developing severe forms of such infections. The present sequence
 CC is a PCR primer for murine OAS, which was used in an example from the
 CC invention
 XX SQ Sequence 20 BP; 8 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.8; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 1e+03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 2028 GTTCTCTTTTGAGATA 2044
 Db |||||
 20 GTTCTCTTCTGAGACA 4
 RESULT 1059
 ACC42410/c
 ID ACC42410 standard; DNA; 20 BP.
 XX
 XX ACC42410;
 AC
 XX 26-AUG-2003 (first entry)
 DT
 XX Acyl CoA cholesterol acyltransferase-2 antisense oligo ISIS #140145.
 DE Acyl CoA cholesterol acyltransferase-2; antisense therapy; antilipemic;
 XX antiarteriosclerotic; cardiovascular; ACAT-2; lipid metabolism;
 KW

KW cholesterol metabolism; atherosclerosis; cardiovascular disease;
 KW phosphorothioate; human; ss.
 XX Synthetic.
 OS Key Location/Qualifiers
 FH modified_base 1..20
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "Oligonucleotide has phosphorothioate backbone and
 FT all cytidine nucleotides are 5-methylcytidine. Optionally
 FT some nucleotides with 2'-methoxyethyl (2'-MOE wings)
 XX modification"
 XX W02003011889-A2.
 PN 13-FEB-2003.
 XX 15-JUL-2002; 2002WO-US022746.
 PF 30-JUL-2001; 2001US-00918026.
 XX (ISIS-) ISIS PHARM INC.
 PA Crooke RM, Graham MJ, Lemonidis KM;
 XX WPI; 2003-248145/24.
 DR New antisense oligonucleotides for modulating acyl CoA cholesterol
 XX acyltransferase-2, e.g. for preventing or treating diseases associated
 PT with abnormal lipid or cholesterol metabolism, atherosclerosis,
 PT cardiovascular disease.
 XX Example 15; Page 88; 112pp; English.
 PS The present invention relates to novel antisense oligonucleotides which
 CC are targeted to human acyl CoA cholesterol acyltransferase-2 (ACAT-2)
 CC nucleotide sequence (ACC42409-ACC42431), and mouse ACAT-2 (ACC42432-
 CC ACC42457). The antisense oligonucleotides specifically hybridise with and
 CC inhibit the expression of ACAT-2 nucleotide sequences (ACC42395 and
 CC ACC42402). ACAT enzymes catalyse the synthesis of cholesterol esters from
 CC free cholesterol and fatty acyl-CoA. The antisense oligonucleotides are
 CC useful for treating an animal which has a disease or condition associated
 CC with ACAT-2, e.g. a condition involving abnormal lipid metabolism, a
 CC condition involving abnormal cholesterol metabolism, atherosclerosis, or
 CC cardiovascular disease
 XX SQ Sequence 20 BP; 2 A; 7 C; 6 G; 5 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.8; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 1e+03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1224 CGCCATCCCTGAGGAGA 1240
 Db |||||
 17 CGCCACCCCTGTGAGA 1
 RESULT 1060
 ABZ21637
 ID ABZ21637 standard; DNA; 20 BP.
 XX
 XX ABZ21637;
 AC
 XX 26-FEB-2003 (first entry)
 DT
 XX Human REG-like protein (RELP) specific PCR primer SEQ ID NO:12.
 DE Human; REG-like protein; RELP; immunoglobulin derived protein; Ig;
 KW immunoglobulin; cytostatic; Ig agonist; immunoglobulin agonist; cancer;
 KW protein therapy; RELP human Ig derived protein; chromosome 1p12-13.1;
 KW PCR primer; ss.
 XX

CC mucin secretion respiratory system associated disease conditions in host.
 CC CLCA2 modulators are useful for preparing a composition for the treatment
 CC of respiratory mucin production associated disease conditions such as
 CC asthma, chronic bronchitis, chronic obstructive pulmonary disease (COPD),
 CC cystic fibrosis or bronchiectasis. Sequences of the invention are used in
 CC the identification of mCLCA4 homologues, as a source of new promoter
 CC elements, in the identification of mCLCA4 expression regulatory factors,
 CC as probes and primers in hybridisation applications, in identification of
 CC expression patterns in biological specimens and in the preparation of in
 CC vitro models for mCLCA4 function. The present sequence is a probe used in
 CC human mucin gene expression studies

SQ Sequence 20 BP; 3 A; 8 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 1e+03; Length 20;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 679 CCAGGAACCTGGGACCT 695
 Db 1 CCAGGAGCTGGGACCT 17

RESULT 1063

AAD55905/c
 ID AAD55905 standard; DNA; 20 BP.

XX AAD55905;

XX AAD55905;

DT 07-AUG-2003 (first entry)

DE Human decorin gene amplifying forward RT-PCR primer.

XX Adipose-derived stem cell; ADSC; transgene; cell therapy; gene therapy;
 KW primer; reverse transcription; RT; PCR; decorin; human; ss.

XX Homo sapiens.

XX WO2003022989-A2.

XX 20-MAR-2003.

PF 31-JUL-2002; 2002WO-US024374.

XX 10-SEP-2001; 2001US-00952522.

XX (REGC) UNIV CALIFORNIA.

PI Hedrick MH, Katz AJ, Lull R, Futrell JW, Benham P, Lorenz HP;
 PI Zhu M;

XX WPI; 2003-354531/33.

XX New isolated adipose-derived stem cell, useful for generating
 PT differentiated tissues and structures both in vivo and in vitro or
 PT providing conditioned culture media to support the growth and expansion
 PT of other cell populations.

PS Example 11; Page 237; 241pp; English.

XX The invention relates to adipose-derived stem cells (ADSC) and lattices
 CC which are useful for generating differentiated tissues and structures
 CC both in vivo and in vitro, for producing molecules such as hormones and
 CC for providing a conditioned culture media for supporting the growth and
 CC expansion of other cell populations. Lattices are useful as substrates
 CC for facilitating the growth and differentiation of cells into mature
 CC tissues or structures. The invention is useful for delivering a transgene
 CC to an animal. The invention is also useful in cell therapy and gene
 CC therapy. The present sequence is reverse transcription PCR (RT-PCR)
 CC primer used to amplify human decorin gene. This sequence is used in the
 CC exemplification of the invention

SQ Sequence 20 BP; 4 A; 3 C; 7 G; 6 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 1e+03; Length 20;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1365 TTCCAACCTCAAAAAG 1381

Db 18 TTCCAACCTCAACCAAG 2

RESULT 1064

ABQ77167/c

ID ABQ77167 standard; DNA; 20 BP.

XX ABQ77167;

XX 24-APR-2003 (first entry)

XX Human ABC12 exon 3/intron 3 boundary.

XX Adenosine triphosphate (ATP)-binding cassette transporter subfamily C12;
 KW cystic fibrosis transmembrane conductance regulator; human; CFTR/MRP;
 KW multidrug resistance-like subgroup; somatic gene therapy; ABC12;
 KW paroxysmal kinesigenic choreoathetosis; cysteinyl leukotriene;
 KW anionic drug; methotrexate; neutral drug; glutathione; glucuronate;
 KW sulphate conjugated drug; ds.

XX Homo sapiens.

XX WO200285943-A2.

XX 31-OCT-2002.

PF 05-MAR-2002; 2002WO-EP003320.

XX 05-MAR-2001; 2001US-0272759P.

XX (AVET) AVENTIS PHARMA SA.

PA (USSH) US DEPT HEALTH & HUMAN SERVICES.

XX Rosier-Montus M, Prades C, Arnould-Reguigne I, Deneffe P, Dean M;
 XX Allikmets R;

XX WPI; 2003-093101/08.

XX New ATP-binding cassette transporter gene subfamily C12, ABC12
 PT polypeptide, useful for preventing or treating paroxysmal kinesigenic
 PT choreoathetosis.

PS Disclosure; Page 43; 122pp; English.

XX This invention describes a novel human ABC12 (adenosine triphosphate
 CC (ATP)-binding cassette transporter gene subfamily C12, i.e. cystic
 CC fibrosis transmembrane conductance regulator/multidrug resistance-like
 CC subgroup (CFTR/MRP) family) polypeptide and its encoding polynucleotides
 CC The polypeptide is useful for screening agonists and antagonist of the
 CC ABC12 polypeptide. The products of the invention are useful for
 CC screening an active ingredient for preventing and treating paroxysmal
 CC kinesigenic choreoathetosis or pathologies linked to dysfunction of
 CC transport of organic anion transporters such as cysteinyl leukotriene,
 CC anionic drugs, such as methotrexate, neutral drugs conjugated to acidic
 CC ligands, such as glutathione, glucuronate or sulphate conjugated drugs
 CC and can be used for somatic gene therapy. This sequence represents a
 CC region corresponding to an exon/intron boundary from the gene encoding a
 CC human ABC12 isoform described in the disclosure of the invention

SQ Sequence 20 BP; 2 A; 5 C; 11 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 1e+03; Length 20;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1179 GCTGCCGACGACCTG 1195

Db 20 GCTGCGCACTACCGG 4

RESULT 1065
ABZ10392/C
ID ABZ10392 standard; DNA; 20 BP.

XX AC ABZ10392;

XX XX 16-JAN-2003 (first entry)

XX DE Haematopoietic cell proliferation disorder related primer SEQ ID NO:532.

XX XX Human; haematopoietic cell proliferation disorder; cytostatic;
KW gene therapy; lymphocytic leukaemia; acute myelogenous leukaemia;
KW cytosine methylation state; probe; primer; ss.

XX OS Homo sapiens.
OS Synthetic.

XX PN WO200277272-A2.

XX XX 03-OCT-2002.

XX XX 26-MAR-2002; 2002WO-EP003401.

XX PF 26-MAR-2001; 2001US-0278333P.

XX PR (EPIG-) EPIGENOMICS AG.

XX PA Berlin K, Braun A, Distler J, Guetig D, Howe A, Mueller J;

XX PI Olek A, Piepenbrock C, Adorjan P, Grabs G, Lesche R, Leu E;
PI Lewin A, Lipscher E, Maier S, Model F, Mueller V, Otto I, Pelet C;
PI Schwowe I, Ziebarth H;

XX DR WPI; 2003-018942/01.

XX PT Detecting and differentiating between hematopoietic cell proliferative
PT disorders, comprises contacting a target nucleic acid with a reagent that
PT distinguishes between methylated and non-methylated CpG dinucleotides.

XX PS Claim 11; Page 31; 117pp; English.

XX CC The present invention describes a method for detecting and
CC differentiating between haematopoietic cell proliferative disorders
CC associated with at least 1 gene and/or their regulatory regions in a
CC subject. The method comprises contacting a target nucleic acid in a
CC biological sample obtained from the subject with at least 1 reagent,
CC which distinguishes between methylated and non-methylated CpG
CC dinucleotides within the target nucleic acid. ABZ03861 to ABZ11118
CC represent specifically claimed nucleotide sequences from the present
CC invention. Oligonucleotides from the present invention can be used: for
CC differentiating between healthy haematopoietic cells and proliferative
CC disorder haematopoietic cells; for differentiating between acute
CC lymphocytic leukaemia and acute myelogenous leukaemia; as probes for
CC determining the cytosine methylation state and/or single nucleotide
CC polymorphisms (SNPs) of haematopoietic cell proliferation disorder
CC related sequences and their complements; and as primers for the
CC amplification of haematopoietic cell proliferation disorder related DNA
CC sequences. The nucleotide sequences from the present invention can also
CC be used for detecting a predisposition to, differentiation between
CC subclasses, diagnosis, prognosis, treatment and/or monitoring of
CC haematopoietic cell proliferative disorders. The present method enables a
CC highly specific classification of haematopoietic cell proliferative
CC disorders allowing for improved and informed treatment of patients

XX SQ Sequence 20 BP; 8 A; 0 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. NO. 1e-03; Indels 0; Gaps 0;
Matches 15; Conservative 0; Mismatches 2;

QY 95 TCTGTTACTACTACGAC 111
Db 20 TCTCTTACTACTACTAC 4

RESULT 1066
ABZ10253/C

ID ABZ10253 standard; DNA; 20 BP.

XX AC ABZ10253;

XX XX 16-JAN-2003 (first entry)

XX DE Haematopoietic cell proliferation disorder related primer SEQ ID NO:393.

XX XX Human; haematopoietic cell proliferation disorder; cytostatic;
KW gene therapy; lymphocytic leukaemia; acute myelogenous leukaemia;
KW cytosine methylation state; probe; primer; ss.

XX OS Homo sapiens.
OS Synthetic.

XX PN WO200277272-A2.

XX XX 03-OCT-2002.

XX XX 26-MAR-2002; 2002WO-EP003401.

XX PF 26-MAR-2001; 2001US-0278333P.

XX PR (EPIG-) EPIGENOMICS AG.

XX PA Berlin K, Braun A, Distler J, Guetig D, Howe A, Mueller J;

XX PI Olek A, Piepenbrock C, Adorjan P, Grabs G, Lesche R, Leu E;
PI Lewin A, Lipscher E, Maier S, Model F, Mueller V, Otto T, Pelet C;
PI Schwowe I, Ziebarth H;

XX DR WPI; 2003-018942/01.

XX PT Detecting and differentiating between hematopoietic cell proliferative
PT disorders, comprises contacting a target nucleic acid with a reagent that
PT distinguishes between methylated and non-methylated CpG dinucleotides.

XX PS Claim 11; SEQ ID NO 393; 117pp; English.

XX CC The present invention describes a method for detecting and
CC differentiating between haematopoietic cell proliferative disorders
CC associated with at least 1 gene and/or their regulatory regions in a
CC subject. The method comprises contacting a target nucleic acid in a
CC biological sample obtained from the subject with at least 1 reagent,
CC which distinguishes between methylated and non-methylated CpG
CC dinucleotides within the target nucleic acid. ABZ03861 to ABZ11118
CC represent specifically claimed nucleotide sequences from the present
CC invention. Oligonucleotides from the present invention can be used: for
CC differentiating between healthy haematopoietic cells and proliferative
CC disorder haematopoietic cells; for differentiating between acute
CC lymphocytic leukaemia and acute myelogenous leukaemia; as probes for
CC determining the cytosine methylation state and/or single nucleotide
CC polymorphisms (SNPs) of haematopoietic cell proliferation disorder
CC related sequences and their complements; and as primers for the
CC amplification of haematopoietic cell proliferation disorder related DNA
CC sequences. The nucleotide sequences from the present invention can also
CC be used for detecting a predisposition to, differentiation between
CC subclasses, diagnosis, prognosis, treatment and/or monitoring of
CC haematopoietic cell proliferative disorders. The present method enables a
CC highly specific classification of haematopoietic cell proliferative
CC disorders allowing for improved and informed treatment of patients

XX SQ Sequence 20 BP; 8 A; 0 C; 7 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. NO. 1e-03; Indels 0; Gaps 0;
Matches 15; Conservative 0; Mismatches 2;

```

OY 95 TCTGTTACTACTACGAC 111
DB 20 TCTCTTACTACTACTAC 4

RESULT 1067
ABQ81005/c
ID ABQ81005 standard; DNA; 20 BP.
XX
AC ABQ81005;
XX
DT 10-JAN-2003 (first entry)
XX
DE Fibroblast Growth Factor 1, FGF1, binding oligonucleotide #2.
XX
KW Triple helix; FGF1; Fibroblast Growth Factor 1; ss.
XX
OS Synthetic.
XX
PN WO200277274-A2.
XX
PD 03-OCT-2002.
XX
PF 25-MAR-2002; 2002WO-FR001034.
XX
PR 23-MAR-2001; 2001FR-00003953.
XX
PR 23-APR-2001; 2001US-0285272P.
XX
PA (AVET ) AVENTIS PHARMA SA.
XX
PI Blanche F, Cameron B;
XX
DR WPI; 2003-018943/01.
XX
PT Purifying double-stranded DNA, useful e.g. for isolating plasmids or
PT therapeutic genes, by triple helix formation with oligonucleotide
PT directed to a specific target sequence.
XX
PS Claim 10; Page 9; 49pp; French.
XX
CC The present invention relates to novel double stranded (ds) DNA sequences
CC which can interact with a third strand to form a stable triple helix. The
CC invention also relates to a method for purifying a ds DNA molecule,
CC comprising contact with a third DNA strand that interacts with a target
CC sequence (TS) in the ds DNA to form a triple helix. To illustrate the
CC invention, an oligonucleotide from human FGF1 gene (ABQ81003) was used as
CC the ds DNA sequence. The present sequence is one such third strand that
CC can bind to ABQ81003 to form a triple helix. FGF1 is Fibroblast Growth
CC Factor 1
XX
PI Blanche F, Cameron B;
XX
DR WPI; 2003-018943/01.
XX
PT Purifying double-stranded DNA, useful e.g. for isolating plasmids or
PT therapeutic genes, by triple helix formation with oligonucleotide
PT directed to a specific target sequence.
XX
PS Claim 10; Page 9; 49pp; French.
XX
CC The present invention relates to novel double stranded (ds) DNA sequences
CC which can interact with a third strand to form a stable triple helix. The
CC invention also relates to a method for purifying a ds DNA molecule,
CC comprising contact with a third DNA strand that interacts with a target
CC sequence (TS) in the ds DNA to form a triple helix. To illustrate the
CC invention, an oligonucleotide from human FGF1 gene (ABQ81003) was used as
CC the ds DNA sequence. The present sequence is one such third strand that
CC can bind to ABQ81003 to form a triple helix. FGF1 is Fibroblast Growth
CC Factor 1
XX
SQ Sequence 20 BP; 0 A; 6 C; 1 G; 13 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1422 AGAGGAGGAAGGAAG 1438
DB 19 AGAGAGGAAGGAAG 3

RESULT 1068
ABQ81007/c
ID ABQ81007 standard; DNA; 20 BP.
XX
AC ABQ81007;
XX
DT 10-JAN-2003 (first entry)
XX
DE Fibroblast Growth Factor 1, FGF1, binding oligonucleotide #4.
XX
KW Triple helix; FGF1; Fibroblast Growth Factor 1; ss.

OY 1422 AGAGGAGGAAGGAAG 1438
DB 19 AGAGAGGAAGGAAG 3

RESULT 1069
ACC80572
ID ACC80572 standard; DNA; 20 BP.
XX
AC ACC80572;
XX
DT 28-AUG-2003 (first entry)
XX
DE Pluripotent stem cell generation method control gene primer nestin #2.
XX
KW Immunosuppressive; ss; primer; pluripotent stem cell; transplantation;
KW major histocompatibility antigen; immune rejection.
XX
OS Homo sapiens.
XX
PN WO2003027278-A1.
XX
PD 03-APR-2003.
XX
PF 20-SEP-2002; 2002WO-JP009732.
XX
PR 21-SEP-2001; 2001JP-00290005.
XX
PA (TRAN-) TRANS-SCI INC.
PA (NAKA/) NAKATSUJI N.
PA (TADA/) TADA T.
XX
PI Nakatsuji N, Tada T, Tada M;

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PS Disclosure; Page 38; 71pp; English.
CC The invention relates to an isolated polypeptide having histone
CC deacetylase (HDAC) activity. Polypeptides and nucleic acids of the
CC invention are useful for screening for candidate compounds that share,
CC bind to, or inhibit histone deacetylase 9 (HDAC9) biological activity,
CC and for diagnosing or prognosing cancer, e.g. leukaemia such as TEL-AML1
CC positive and negative pre-B cell acute lymphoblastic leukemia or B cell
CC lymphoma. The current sequence represents a primer for cloning the DNA
CC encoding the human HDAC9deltaExon15 isoform
XX
SQ Sequence 20 BP; 5 A; 4 C; 5 G; 6 T; 0 U; 0 Other;
    Query Match          0.7%; Score 13.8; DB 1; Length 20;
    Best Local Similarity 88.2%; Pred. No. 1e+03;
    Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1762 GGATACCTTTTATGCAAC 1778
    ||| ||||| |||||
Db 2 GGCTGCTTTTATGCAAC 18

RESULT 1072
ABX93577/c
ID ABX93577 standard; DNA; 20 BP.
XX
AC ABX93577;
XX
DT 23-MAY-2003 (first entry)
XX
DE Probe for a mutant Rep recognition sequence.
XX
KW Inverted terminal repeat; Rep recognition sequence; AAV-2; ss; RRS;
KW viral regulatory element; probe; yeast one hybrid system; mutant.
XX
OS Adeno-associated virus serotype 2.
OS Synthetic.
XX
PN US2002182595-A1.
XX
PD 05-DEC-2002.
XX
PF 29-APR-2002; 2002US-00135984.
XX
PR 27-APR-2001; 2001US-0286951P.
XX
PA (WEIT/) WEITZMAN M D.
PA (CATH/) CATHOMEN A J.
XX
PI Weitzman MD, Cathomen AJ;
XX
DR WPI; 2003-328607/31.
XX
PT Identification of cellular regulations of adeno-associated virus involves
PT contacting an adeno-associated viral regulatory interacting molecule with
PT a nucleic acid comprising a adeno-associated viral regulatory element.
XX
PS Example 2; Page 12; 16pp; English.
XX
CC The invention relates to identifying molecules that interact with an
CC adeno-associated viral regulatory element (e.g. a Rep recognition
CC sequence, RRS) comprising contacting at least one molecule with a nucleic
CC acid comprising at least one adeno-associated viral regulatory element,
CC and identifying whether at least one molecule is bound to the viral
CC regulatory elements. Also included is a kit for analysing the interaction
CC between molecules and an adeno-associated viral regulatory element. The
CC method is useful for identifying molecules e.g. at least one cellular
CC protein, recombinant protein, synthetic protein or exogenous protein
CC (preferably human proteins that are derived from a cDNA library or
CC cellular lysate), or peptide, antibody, nucleic acid, lipid, carbohydrate
CC and/or organic or inorganic compound that interacts with an adeno-
CC associated viral regulatory element comprising an inverted terminal
CC repeat (ITR) or region. The method broadens the understanding of adeno-

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CC associated virus (AAV) and facilitates the application of adeno-
CC associated virus-based vector system, therefore ITR-binding proteins and
CC other molecules provide new insights into the AAV life cycle, including
CC the regulation of gene expression and integration, and suggests
CC improvements for its application in therapy. The present sequence is an
CC oligonucleotide probe for wild-type a mutant RRS sequence, used in a
CC yeast one hybrid experiment
XX
SQ Sequence 20 BP; 1 A; 14 C; 1 G; 4 T; 0 U; 0 Other;
    Query Match          0.7%; Score 13.8; DB 1; Length 20;
    Best Local Similarity 88.2%; Pred. No. 1e+03;
    Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 11 GCGGGGGGAGGGCGGA 27
    ||| ||||| |||||
Db 18 GAGGGAGGGAGGGCGGA 2

RESULT 1073
ACC70524/c
ID ACC70524 standard; DNA; 20 BP.
XX
AC ACC70524;
XX
DT 13-AUG-2003 (first entry)
XX
DE Sphingosine-1-phosphate lyase antisense oligonucleotide, SEQ ID 17.
XX
KW Cytostatic; antimicrobial; antiinflammatory; tumour; infection;
KW sphingosine-1-phosphate lyase; developmental disorder; apoptosis;
KW inflammation; antisense; phosphorothioate; ss.
XX
OS Synthetic.
XX
PH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "This oligonucleotide has a phosphorothioate
FT backbone and 2'-methoxyethyl (2'-MOE) wings at the 5',
FT and 3' ends, which are 5 nucleotides in length. Also all
FT cytidine residues are 5-methylcytidines"
XX
PN WO2003028637-A2.
XX
PD 10-APR-2003.
XX
PF 26-SEP-2002; 2002WO-US030575.
XX
PR 28-SEP-2001; 2001US-00967669.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Bennett FC, Freier SM;
XX
DR WPI; 2003-381581/36.
XX
PT New antisense oligonucleotides for modulating sphingosine-1-phosphate
PT lyase gene expression, useful for preventing or treating a developmental
PT disorder or aberrant apoptosis, e.g. infection, inflammation or tumor
PT formation.
XX
PS Example 15; Page 72; 118pp; English.
XX
CC The present invention relates to novel antisense oligonucleotides
CC (ACC70520-ACC70597) which are targeted to a sphingosine-1-phosphate lyase
CC DNA sequence, and specifically hybridizes with the nucleic acid and
CC inhibits the expression of sphingosine-1-phosphate lyase. The antisense
CC oligonucleotides are useful for treating an animal having a disease or
CC condition associated with sphingosine-1-phosphate lyase, particularly a
CC developmental disorder, or a disease or condition arising from aberrant
CC apoptosis, e.g. infection, inflammation or tumour formation

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XX SQ Sequence 20 BP; 3 A; 2 C; 6 G; 9 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 13.8; DB 1; Length 20;
XX Best Local Similarity 88.2%; Pred. No. 1e+03;
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 1371 CTTCAAAAAGCCCAAGA 1387
XX Db 20 CTCACAAAAGCCCAAGA 4
XX
XX RESULT 1074
XX ADA26659/c
XX ID ADA26659 standard; DNA; 20 BP.
XX AC ADA26659;
XX
XX DT 20-NOV-2003 (first entry)
XX
XX DE Rat Jun N-terminal kinase, JNK1, antisense oligonucleotide ISIS21858.
XX
XX SS; rat; Jun N-terminal kinase; JNK1; JNK2; JNK3; antisense; cytostatic;
XX antiinflammatory; apoptosis; prostate cancer; prostate tumour;
XX inflammation; fibrosis; fibrotic disease; fibrotic scarring;
XX peritoneal adhesion; lung fibrosis; conjunctival scarring;
XX hyperproliferative disease; cancer; probe.
XX
XX OS Rattus norvegicus.
XX
XX Key Location/Qualifiers
XX modified_base 1..20
XX /*tag= b
XX /mod_base= OTHER
XX
XX modified_base 1..5
XX /*tag= a
XX /mod_base= OTHER
XX linkages"
XX 16..20
XX /*tag= c
XX /mod_base= OTHER
XX linkages"
XX 16..20
XX /*tag= c
XX /mod_base= OTHER
XX linkages"
XX 16..20
XX
XX US2003004120-A1.
XX
XX PD 02-JAN-2003.
XX
XX PF 31-JAN-2001; 2001US-00774809.
XX
XX PR 13-AUG-1997; 97US-00910629.
XX PR 07-AUG-1998; 98US-00130616.
XX PR 07-APR-1999; 99US-00287796.
XX PR 15-SEP-1999; 99US-00396902.
XX
XX PA (MCKA/) MCKAY R.
XX PA (DEAN/) DEAN N M.
XX PA (MONI/) MONIA B P.
XX PA (NERO/) NERO P.
XX PA (GAAR/) GAARDE W A.
XX
XX PI McKay R, Dean NM, Monia BP, Nero P, Gaarde WA;
XX
XX DR WPI; 2003-311908/30.
XX
XX
XX New oligonucleotides which hybridizes to, and modulates the expression of
XX Jun N-terminal kinase, useful for treating a disease or condition
XX characterized by a reduction in apoptosis, e.g. prostate cancer,
XX inflammation or fibrosis.
XX
XX Example 7; Page 33; 69pp; English.
XX

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XX SQ Sequence 20 BP; 0 A; 9 C; 6 G; 5 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 13.8; DB 1; Length 20;
XX Best Local Similarity 88.2%; Pred. No. 1e+03;
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX QY 3 GCGGAGCCGCGCGCGG 19
XX Db 17 GCGGAGCCGCGGACGAG 1
XX
XX RESULT 1075
XX ACC62363/c
XX ID ACC62363 standard; DNA; 20 BP.
XX AC ACC62363;
XX
XX DT 23-JUN-2003 (first entry)
XX
XX DE Human NOV5 reverse PCR primer SEQ ID NO:238.
XX
XX KW Human; NOVX; antiatherosclerotic; hypotensive; cardiac; dermatological;
XX anorectic; immunosuppressive; cytostatic; antidiabetic; antiinfertility;
XX haemostatic; antiinflammatory; antiasthmatic; anti-HIV; immunomodulator;
XX neuroprotective; nootropic; antiparkinsonian; metabolic; antilipaeic;
XX gene therapy; cardiomyopathy; atherosclerosis; hypertension; scleroderma;
XX congenital heart defect; aortic stenosis; valve disease; transplantation;
XX tuberosus sclerosis; obesity; congenital adrenal hyperplasia; diabetes;
XX prostate cancer; metabolic disorder; neoplasm; lymphoma; uterus cancer;
XX fertility; haemophilia; hypercoagulation; graft versus host disease;
XX idiopathic thrombocytopenic purpura; AIDS; bronchial asthma; anorexia;
XX Crohn's disease; multiple sclerosis; infectious disease; cancer;
XX cancer-associated cachexia; Alzheimer's disease; Parkinson's disease;
XX immune disorder; haematopoietic disorder; dyslipidaemia;
XX metabolic syndrome X; PCR primer; ss.
XX
XX OS Homo sapiens.
XX OS Synthetic.
XX
XX PN WO2003023001-A2.
XX

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XX AC F05378;
XX DT 06-NOV-2003 (first entry)
XX DE Human sialyltransferase forward PCR primer.
XX KW Human; sialyltransferase; enzyme; antidiabetic; cytostatic; cardiant;
XX KW antiasthmatic; neuroprotective; gene therapy; PCR; primer; ss.
XX OS Homo sapiens.
XX PN WO2003052088-A2.
XX PD 26-JUN-2003.
XX PF 17-DEC-2002; 2002WO-EP014360.
XX PR 18-DEC-2001; 2001US-0340262P.
XX PR 08-JUL-2002; 2002US-0393844P.
XX PA (FARB ) BAYER AG.
XX PI Smolyar A;
XX DR WPI; 2003-569150/53.
XX PT New isolated polynucleotide encoding a sialyltransferase polypeptide, is
XX PT useful for identifying reagents that modulate the activity of
XX PT sialyltransferase and are thus useful for treating asthma, diabetes etc.
XX PS Example 13; Page 96; 118pp; English.
XX CC The present sequence is a forward primer, which was used with the reverse
XX CC primer given in ACF05379 and the probe given in ACF05380 to determine the
XX CC expression profile of the novel human sialyltransferase polynucleotide
XX CC (see ABR62584 and ABR62585) of the invention. The invention provides
XX CC human sialyltransferase polynucleotides and polypeptides and methods for
XX CC their detection and production, as well as expression vectors and host
XX CC cells, and methods of screening for reagents that regulate human
XX CC sialyltransferase or which bind to human sialyltransferase gene products.
XX CC The expression vectors or reagents can be used to modulate
XX CC sialyltransferase activity in a disease, especially diabetes, cancer, a
XX CC central nervous system disorder, cardiovascular disorder, chronic
XX CC obstructive pulmonary disorder or asthma (claimed)
XX SQ Sequence 20 BP; 2 A; 8 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 311 ACATGTCGGAGTACAGC 327
    ||||| |||||
Db 18 ACATGGAGGAGTACAGC 2

RESULT 1078
AAD57575
ID AAD57575 standard; DNA; 20 BP.
XX AC AAD57575;
XX DT 20-NOV-2003 (first entry)
XX DE Human PLSCR3 antisense oligonucleotide, ISIS #196387.
XX KW Human; phospholipid scramblase 3; gene therapy; HuPLSCR3; MuPLSCR3;
XX KW PLSCR3; neurodegenerative disease; hyperproliferative disorder;
XX KW autoimmune disorder; neuroprotective; immunosuppressive; antisense;
XX KW phosphorothioate backbone; ss.
XX OS Homo sapiens.

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OS Synthetic.
XX Key Location/Qualifiers
XX modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidine residues
FT are 5-methylcytidines"
FT modified_base 1..5
FT /tag= b
FT /mod_base= OTHER
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl nucleotides"
XX WO2003048324-A2.
XX PN 12-JUN-2003.
XX PD 04-DEC-2002; 2002WO-US038521.
XX PF 04-DEC-2001; 2001US-00006972.
XX PR (ISIS-) ISIS PHARM INC.
XX PA Dobie KW;
XX PI WPI; 2003-569053/53.
XX DR New compound, useful for preparing a composition for treating
XX DR hyperproliferative or autoimmune disorders, comprises a sequence targeted
XX DR to a nucleic acid encoding human phospholipid scramblase 3.
XX PS Example 15; Page 78; 107pp; English.
XX CC The present invention is directed to compounds, particularly antisense
XX CC oligonucleotides, which are targeted to a nucleic acid encoding human
XX CC phospholipid scramblase 3 (also known as PLSCR3, HuPLSCR3 and MuPLSCR3)
XX CC and which modulates the expression of phospholipid scramblase 3. The
XX CC compounds of the invention are useful for preparing compositions for
XX CC treating neurodegenerative diseases e.g. hyperproliferative or autoimmune
XX CC disorders. The invention is also used in gene therapy. The present
XX CC sequence is an antisense oligonucleotide targeted to human PLSCR3 DNA
XX SQ Sequence 20 BP; 4 A; 3 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1737 AAAGGTGCCAGGTCTG 1753
    ||||| |||||
Db 3 AAGGATGCCAGGTCTG 19

RESULT 1079
ADA24256
ID ADA24256 standard; DNA; 20 BP.
XX AC ADA24256;
XX DT 20-NOV-2003 (first entry)
XX DE Major allergenic storage protein FAGAG1 PCR primer FAG22 SEQ ID NO:9.
XX KW food testing; allergen; PCR primer; Fagopyrum esculentum;
XX KW major allergenic storage protein; FAGAG1; ss.
XX OS Synthetic.
XX OS Fagopyrum esculentum.

```


PN W02003068964-AL.
XX 21-AUG-2003.
XX 26-SEP-2002; 2002WO-JP009982.
XX PR 15-FEB-2002; 2002JP-00038930.
XX (NISS) NISSHIN SEIFUN GROUP INC.
XX Yamakawa H, Suzuki E, Miyatake K, Hayakawa K;
PI WPI; 2003-637145/60.
XX PCR-based method for testing foods using specific primers designed from
PT genes of target substance, useful in detecting trace components or
PT identifying specific harmful allergens in (processed) foods.
XX
XX Disclosure; Page 10; 38pp; Japanese.
XX The present invention describes a method for testing the presence or
CC absence of a specific substance in a food by performing PCR with primers
CC which are designed on the basis of data obtained from a part of a gene of
CC the specific substance. Also described: (1) a similar method for
CC detecting a trace component contained in a food, or for identifying a
CC harmful allergen specific to a consumer of such substance by performing
CC PCR with primers which are designed on the basis of data obtained from a
CC part of a gene of the specific substance; (2) primers for PCR applicable
CC in food testing which are designed on the basis of data obtained from a
CC part of a gene of the specific substance; and (3) kits for determining
CC The methods are useful for testing foods, which can be used in detecting
CC trace components or identifying specific harmful allergens in (processed)
CC foods, particularly applicable in food safety and management. The present
CC sequence represents a PCR primer for a *Fagopyrum esculentum* major
CC allergenic storage protein designated FAGAG1, which is used in the
CC exemplification of the present invention.
XX
XX Sequence 20 BP; 1 A; 11 C; 1 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1699 CTTGCCACCCATTCTTC 1715
DB 4 CTTGCCCTCCATCTTC 20
RESULT 1080
AAL61706/c
ID AAL61706 standard; DNA; 20 BP.
XX AAL61706;
XX 22-SEP-2003 (first entry)
XX Human PCTAIRE protein kinase 1 antisense oligo, ISIS 204143.
XX Human; PCTAIRE protein kinase 1; PCTAIRE-1; sideroblastic anaemia;
KW hyperproliferative disease; neurological disease; thrombocytopaenia;
KW retinitis pigmentosa; X-linked Charcot-Marie-Tooth disease; therapy;
KW mental retardation; Wiskott-Aldrich syndrome; dystonia; Parkinsonism;
KW PTK1; crk5; incontinentia pigmenti; phosphorothioate backbone;
KW antisense; ss.
XX Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER

FT /note= "Phosphorothioate backbone; All cytidines are 5'-
FT methylcytidines"
FT modified_base 1..5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
XX W02003049691-A2.
XX 19-JUN-2003.
XX 06-DEC-2002; 2002WO-US039138.
XX 07-DEC-2001; 2001US-00017621.
XX (ISIS-) ISIS PHARM INC.
XX Freier SM, Roach MP;
XX WPI; 2003-577271/54.
XX New antisense oligonucleotides for modulating PCTAIRE protein kinase 1
PT gene expression, particularly useful for treating hyperproliferative or
PT neurological disorders for example, mental retardation, or
PT thrombocytopenia.
XX Claim 3; Page 74; 104pp; English.
XX The invention relates to antisense compounds, compositions and methods
CC for modulating the expression of PCTAIRE protein kinase 1 (also known as
CC PCTAIRE-1, PTK1 and crk5). The antisense oligonucleotide is useful for
CC treating an animal having a disease or condition associated with PCTAIRE
CC protein kinase 1, particularly a hyperproliferative disease or a
CC neurological disease. These diseases include thrombocytopaenia, mental
CC retardation, Wiskott-Aldrich syndrome, retinitis pigmentosa, dystonia
CC with Parkinsonism, sideroblastic anaemia, X-linked Charcot-Marie-Tooth
CC disease, or incontinentia pigmenti. The antisense oligonucleotide is
CC particularly useful for inhibiting the expression of PCTAIRE protein
CC kinase 1 in cells or tissues. It is useful for diagnostics, prophylaxis,
CC or as research reagents or kits. The present sequence is an antisense
CC oligonucleotide targetted to human PCTAIRE protein kinase 1 DNA. This
CC sequence is used to illustrate the method of the invention
XX
SQ Sequence 20 BP; 2 A; 7 C; 2 G; 9 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1139 TGGAGAAGATCAACAG 1155
DB 17 TGAAGAGATCAACGG 1
RESULT 1081
ACH11182
ID ACH11182 standard; DNA; 20 BP.
XX ACH11182;
XX 08-OCT-2003 (first entry)
XX Human protein kinase C-eta targeted oligonucleotide #11.
XX Human; ss; antisense; PKC; protein kinase C; hyperproliferation; tumour;
KW inflammation; psoriasis; cancer; non-small cell lung cancer; lung cancer;
KW non-Hodgkin's lymphoma; glioblastoma; bladder cancer; colon cancer;
KW breast cancer; ovarian cancer; pancreatic cancer.
XX

OS Homo sapiens.
 XX US6537973-B1.
 XX 25-MAR-2003.
 XX 18-DEC-2001; 2001US-00025139.
 XX 16-MAR-1992; 92US-00852852.
 PR 09-JUL-1993; 93US-00089996.
 PR 07-JUN-1995; 95US-00478178.
 PR 31-MAR-1997; 97US-00829637.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX Bennett CF, Dean NM, Holmlund JT, Dorr FA;
 XX WPI; 2003-531084/50.
 XX
 XX New pharmaceutical composition, useful for treating cancer, e.g., non-small cell lung cancer or non-Hodgkin's lymphoma.
 XX Example 4; Col 17; 56pp; English.
 XX The invention relates to a new pharmaceutical composition comprising: (a) an oligonucleotide sequence having up to 50 base pairs (bp); and (b) carboplatin and paclitaxel, cisplatin and gemcitabine, 5-fluorouracil and leucovorin, or docetaxel. The pharmaceutical composition is useful for treating diseases associated with protein kinase C such as hyperproliferative and inflammatory conditions e.g. psoriasis, tumours and cancer e.g. non-small cell lung cancer, non-Hodgkin's lymphoma, glioblastoma, bladder cancer, lung cancer, colon cancer, breast cancer, ovarian cancer and pancreatic cancer. The present sequence represents an antisense oligonucleotide targeted against protein kinase C
 XX Sequence 20 BP; 4 A; 3 C; 9 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 13.8; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 1e+03; Indels 0; Gaps 0;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 946 ATGCTGATGCTGGGAGG 962
 Db 1 AGGCTGATGCTGGGAGG 17
 RESULT 1082
 ACH11194
 ID ACH11194 standard; DNA; 20 BP.
 AC ACH11194;
 XX 08-OCT-2003 (first entry)
 DE Human protein kinase C-eta targeted oligonucleotide #21.
 XX Human; ss; antisense; PKC; protein kinase C; hyperproliferation; tumour; inflammation; psoriasis; cancer; non-small cell lung cancer; lung cancer; non-Hodgkin's lymphoma; glioblastoma; bladder cancer; colon cancer; breast cancer; ovarian cancer; pancreatic cancer.
 XX Homo sapiens.
 XX US6537973-B1.
 XX 25-MAR-2003.
 XX 18-DEC-2001; 2001US-00025139.
 XX 16-MAR-1992; 92US-00852852.
 PR 09-JUL-1993; 93US-00089996.
 PR 07-JUN-1995; 95US-00478178.
 PR 31-MAR-1997; 97US-00829637.

XX (ISIS-) ISIS PHARM INC.
 XX Bennett CF, Dean NM, Holmlund JT, Dorr FA;
 XX WPI; 2003-531084/50.
 XX
 XX New pharmaceutical composition, useful for treating cancer, e.g., non-small cell lung cancer or non-Hodgkin's lymphoma.
 XX Example 14; Col 21; 56pp; English.
 XX The invention relates to a new pharmaceutical composition comprising: (a) an oligonucleotide sequence having up to 50 base pairs (bp); and (b) carboplatin and paclitaxel, cisplatin and gemcitabine, 5-fluorouracil and leucovorin, or docetaxel. The pharmaceutical composition is useful for treating diseases associated with protein kinase C such as hyperproliferative and inflammatory conditions e.g. psoriasis, tumours and cancer e.g. non-small cell lung cancer, non-Hodgkin's lymphoma, glioblastoma, bladder cancer, lung cancer, colon cancer, breast cancer, ovarian cancer and pancreatic cancer. The present sequence represents an antisense oligonucleotide targeted against protein kinase C
 XX Sequence 20 BP; 5 A; 2 C; 9 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 13.8; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 1e+03; Indels 0; Gaps 0;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 946 ATGCTGATGCTGGGAGG 962
 Db 2 AGGCTGATGCTGGGAGG 18
 RESULT 1083
 ACF04217
 ID ACF04217 standard; DNA; 20 BP.
 AC ACF04217;
 XX 06-NOV-2003 (first entry)
 DE Murine embryonic cell line nestin PCR primer #2.
 XX Embryonic stem cell; ES cell; mouse; differentiation; nerve cell; pancreatic islet cell; cell transplant therapy; antidiabetic; neuroprotective; nontoxic; PCR; primer; ss.
 XX Mus sp.
 XX WO2003062405-A2.
 XX 31-JUL-2003.
 XX 27-JAN-2003; 2003WO-JP000699.
 XX 25-JAN-2002; 2002US-00054789.
 XX (OKUM-) OKUMA CONTACTLENS KENKYUSHO YG.
 XX (INOUE) INOUE K.
 XX Inoue K, Kim D, Gu Y, Ishii M;
 XX WPI; 2003-598750/56.
 XX Inducing differentiation of mammalian embryonic stem (ES) cells into functioning cells, for treating e.g. diabetes, comprises culturing ES cells in a medium containing leukemia inhibitor factor and basic fibroblast growth factor.
 XX Example 1; Page 61; 70pp; English.
 XX The present invention relates to a method of inducing differentiation of

CC invention is useful for treating an animal with hyperproliferative or
 CC autoimmune disorder. The invention is useful for diagnostics,
 CC therapeutics, prophylaxis, as research reagents and kits, for
 CC distinguishing functions of various members of a biological pathway and
 CC in antisense gene therapy. The invention is also useful prophylactically
 CC e.g., to prevent or delay infection, inflammation or tumour formation.
 CC The present sequence is an antisense oligo targeted to human ABC
 CC transporter MHC I DNA. This sequence is used to illustrate the method of
 CC the invention

XX SQ Sequence 20 BP; 3 A; 9 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 1e+03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 74 CGCAGGCGCACCGGAGG 90
 ||| ||||| |||||
 Db 2 CGCGGCGCACCGGAGG 18

RESULT 1086

ADB89953/c
 ID ADB89953 standard; DNA; 20 BP.

XX AC ADB89953;

XX 04-DEC-2003 (first entry)

XX Complement C3 targeting antisense oligonucleotide #12.

XX ss; antisense; complement component C3; inflammation; septic shock;
 KW multiple organ failure; hyperacute organ failure; autoimmune disorder;
 KW CNS inflammation; multiple sclerosis; atherosclerosis; tumour.

XX unidentified.

XX US2003096775-A1.

XX 22-MAY-2003.

XX 23-OCT-2001; 2001US-00001076.

XX 23-OCT-2001; 2001US-00001076.

XX (ISIS-) ISIS PHARM INC.

XX Graham MJ, Watt AT;

XX WPI; 2003-606441/57.

XX New antisense oligonucleotides targeted to a nucleic acid molecule
 PT encoding complement component C3, useful for treating a disease or
 PT condition associated with complement component C3, e.g. autoimmune
 PT disorder or infection.

XX Disclosure; Page 54; 72pp; English.

XX The invention relates to a compound 8-50 nucleobases in length targeted
 CC to a nucleic acid molecule encoding complement component C3. The compound
 CC specifically hybridises with the nucleic acid molecule encoding
 CC complement component C3 and inhibits the expression of complement
 CC component C3, or specifically hybridises with at least an 8-nucleobase
 CC portion of an active site on a nucleic acid molecule encoding complement
 CC component C3. Also included are a composition comprising the compound and
 CC a pharmaceutical carrier or diluent, inhibiting the expression of
 CC complement component C3 in cells or tissues (comprising contacting the
 CC cells or tissues with the compound cited above) and treating an animal
 CC having a disease or condition associated with complement component C3
 CC comprising administering to the animal the compound cited above so that
 CC expression of complement component C3 is inhibited. The antisense
 CC compounds are useful for inhibiting the expression of complement
 CC component C3 in cells or tissues, or for treating an animal having a

CC disease or condition associated with complement component C3 such as an
 CC autoimmune disorder (e.g. multiple sclerosis), an infection, or
 CC atherosclerosis, inflammation, septic shock, multiple organ failure,
 CC hyperacute organ failure and CNS inflammation. The compounds are also
 CC useful as research reagents and diagnostics, in distinguishing functions
 CC of various members of a biological pathway, or for preventing or delaying
 CC infection, inflammation or tumour formation. The present sequence is an
 CC antisense oligonucleotide shown in the sequence listing but not mentioned
 CC anywhere else in the specification.

XX SQ Sequence 20 BP; 1 A; 8 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 1e+03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 318 GGAGTACAGCAGCAGA 334
 ||| ||||| |||||
 Db 17 GGAGGAGCAGCAGCAGA 1

RESULT 1087

ADB54442/c

ID ADB54442 standard; DNA; 20 BP.

XX AC ADB54442;

XX 04-DEC-2003 (first entry)

XX PCR primer 110 used to amplify genomic DNA region.

XX colon cell proliferative disorder; non methylated CpG dinucleotide;
 KW cytosatic; cancer; adenoma; carcinoma; cytosine methylation state; ss;
 KW PCR; primer.

XX Unidentified.

XX WO2003072821-A2.

XX 04-SEP-2003.

XX 27-FEB-2003; 2003WO-EP002035.

XX 27-FEB-2002; 2002EP-00004551.

XX (EPIG-) EPIGENOMICS AG.

XX Adorjan P, Burger M, Maier S, Nimrich I, Becker E, Lesche R;
 PI Rujan T, Schmitt A;

XX WPI; 2003-731620/69.

XX Detecting and differentiating between colon cell proliferative disorders
 PT associated with a gene or its regulatory regions comprises contacting a
 PT target nucleic acid in a biological sample obtained from the subject with
 PT a reagent.

XX Claim 15; Page 25; 74pp; English.

XX The invention relates to a novel method for detecting and differentiating
 CC between colon cell proliferative disorders associated with at least one
 CC gene or its regulatory regions. The method comprises contacting a target
 CC nucleic acid in a biological sample obtained from the subject with at
 CC least one reagent or a series of reagents, where the reagent or series of
 CC reagents, distinguishes between methylated and non methylated CpG
 CC dinucleotides within the target nucleic acid. The molecules of the
 CC invention demonstrate cytostatic activity whilst the method may useful
 CC for detecting and differentiating between colon cell proliferative
 CC disorders, including cancers such as colon adenoma and colon carcinoma.
 CC The PNA (peptide nucleic acid)-oligomers are useful as probes for
 CC determining cytosine methylation state or single nucleotide
 CC polymorphisms. The current sequence is that of the PCR primer of the
 CC invention which was used to amplify the genomic DNA region.

```

XX SQ Sequence 20 BP; 0 A; 11 C; 0 G; 9 T; 0 U; 0 Other;
Query Match      0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1422 AGAGGAGAGAGAGAGAG 1438
    ||| ||||| |||||
DB 17 AGGGGAGAGAGAGAGAG 1

RESULT 1088
ADB54341/c
ID ADB54341 standard; DNA; 20 BP.
XX AC ADB54341;
XX DT 04-DEC-2003 (first entry)
XX DE PCR primer 9 used to amplify genomic DNA region.
XX KW colon cell proliferative disorder; non methylated CpG dinucleotide;
XX KW cytosatic; cancer; adenoma; carcinoma; cytosine methylation state; ss;
XX KW PCR; primer.
XX OS Unidentified.
XX PN WO2003072821-A2.
XX PD 04-SEP-2003.
XX PF 27-FEB-2003; 2003WO-EP002035.
XX PR 27-FEB-2002; 2002EP-00004551.
XX PA (EPITG-) EPIGENOMICS AG.
XX PI Adorjan P, Burger M, Maier S, Nimrich I, Becker E, Lesche R;
XX PI Rujan T, Schmitt A;
XX DR WPI; 2003-731620/69.
XX PT Detecting and differentiating between colon cell proliferative disorders
XX PT associated with a gene or its regulatory regions comprises contacting a
XX PT target nucleic acid in a biological sample obtained from the subject with
XX PT a reagent.
XX PS Claim 15; Page 21; 74pp; English.
XX CC The invention relates to a novel method for detecting and differentiating
XX CC between colon cell proliferative disorders associated with at least one
XX CC gene or its regulatory regions. The method comprises contacting a target
XX CC nucleic acid in a biological sample obtained from the subject with at
XX CC least one reagent or a series of reagents, where the reagent or series of
XX CC reagents, distinguishes between methylated and non methylated CpG
XX CC dinucleotides within the target nucleic acid. The molecules of the
XX CC invention demonstrate cytosatic activity whilst the method may useful
XX CC for detecting and differentiating between colon cell proliferative
XX CC disorders, including cancers such as colon adenoma and colon carcinoma.
XX CC The PNA (peptide nucleic acid)-oligomers are useful as probes for
XX CC determining cytosine methylation state or single nucleotide
XX CC polymorphisms. The current sequence is that of the PCR primer of the
XX CC invention which was used to amplify the genomic DNA region.
XX SQ Sequence 20 BP; 8 A; 0 C; 7 G; 5 T; 0 U; 0 Other;
Query Match      0.7%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 95 TCTGTACTACTACGAC 111
    ||| ||||| |||||
DB 20 TCTTACTACTACTAC 4

RESULT 1089
ADB68619
ID ADB68619 standard; DNA; 20 BP.
XX AC ADB68619;
XX DT 04-DEC-2003 (first entry)
XX DE Microsomal triglyceride transfer protein antisense oligonucleotide #35.
XX KW microsomal triglyceride transfer protein; antisense oligonucleotide;
XX KW hybridisation; microsomal triglyceride transfer protein inhibitor;
XX KW cardiant; antiarteriosclerotic; antilipaeamic; antisense gene therapy;
XX KW abnormal lipid metabolism; abnormal cholesterol metabolism;
XX KW atherosclerosis; cardiovascular disease; human; phosphorothioate; ss;
XX KW 2'-O-methoxyethyl.
XX OS Synthetic.
XX OS Homo sapiens.
XX PH Key
XX FT modified_base 1..20
XX FT /tag= b
XX FT /mod_base= OTHER
XX FT /note= "phosphorothioate linkages, and all cytidine
XX FT residues are 5-methylcytidines"
XX FT modified_base 1..5
XX FT /tag= a
XX FT /mod_base= OTHER
XX FT /note= "2'-O-methoxyethyls"
XX FT modified_base 16..20
XX FT /tag= c
XX FT /mod_base= OTHER
XX FT /note= "2'-O-methoxyethyls"
XX PN WO2003018600-A2.
XX PD 06-MAR-2003.
XX PF 17-JUL-2002; 2002WO-US022799.
XX PR 30-JUL-2001; 2001US-00917963.
XX PA (ISIS-) ISIS PHARM INC.
XX PI Crooke RM, Graham MJ;
XX DR WPI; 2003-300705/29.
XX PT New antisense oligonucleotide compounds, useful for diagnosing,
XX PT preventing and/or treating conditions with aberrant activity of the
XX PT microsomal triglyceride transfer protein, such as atherosclerosis and
XX PT heart disease.
XX PS Example 15; Page 95; 135pp; English.
XX CC The present invention describes compounds (I) comprising 8-50 nucleobases
XX CC in length targeted to a nucleic acid molecule encoding a microsomal
XX CC triglyceride transfer protein, where the compounds specifically hybridise
XX CC with and inhibit the expression of the microsomal triglyceride transfer
XX CC protein. Also described: (1) a compound 8-50 nucleobases in length which
XX CC specifically hybridises with at least an 8-nucleobase portion of an
XX CC active site on a nucleic acid molecule encoding microsomal triglyceride
XX CC transfer protein; (2) a composition comprising (1) and a carrier or
XX CC diluent; (3) inhibiting the expression of microsomal triglyceride
XX CC transfer protein in cells or tissues, comprising contacting the cells or
XX CC tissues with (1) so that expression of microsomal triglyceride transfer
XX CC protein is inhibited; and (4) treating an animal having a disease or
XX CC condition associated with microsomal triglyceride transfer protein,
XX CC comprising administering (1) to the animal so that expression of

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CC microsomal triglyceride transfer protein is inhibited. (I) have cardiant,
 CC antiarteriosclerotic and antilipaeamic activities, and can be used in
 CC antisense gene therapy. The methods and compositions of the present
 CC invention are useful for the diagnosis, prevention and/or treatment of
 CC diseases or conditions associated with aberrant expression or activity of
 CC microsomal triglyceride transfer protein, such as an abnormal lipid or
 CC cholesterol metabolism condition like atherosclerosis and cardiovascular
 CC disease. The present sequence represents a human microsomal triglyceride
 CC transfer protein chimeric phosphorothioate antisense oligonucleotide,
 CC which is used in an example from the present invention.
 XX
 SQ Sequence 20 BP; 1 A; 9 C; 2 G; 8 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 1e+03; 2; Indels 0; Gaps 0;
 Matches 15; Conservative 0; Mismatches 2;

QY 1992 CTCTCCTGAATTCGCA 2008
 |||||
 Db 3 CTCTCCTGCTTCGCA 19

RESULT 1090
 ADC6924/c
 ID ADC6924 standard; DNA; 20 BP.
 XX
 AC ADC6924;
 XX
 DT 18-DEC-2003 (first entry)
 XX
 DE Primer oligo used to amplify pretreated genomic DNA (SeqID 413).
 DE
 KW PCR; primer; ss; lung cell proliferative disorder; CpG dinucleotide;
 KW adenocarcinoma; squamous cell carcinoma; cytostatic; probe; PNA-oligomer;
 KW cytosine methylation state.
 XX
 OS Unidentified.

WO2003052135-A2.
 XX
 XX 26-JUN-2003.
 XX
 XX 10-DEC-2002; 2002WO-EP014026.
 XX
 XX 14-DEC-2001; 2001DE-01061625.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Burger M, Field JK, Genc B, Liloglou T, Lipscher E, Maier S;
 PI Nimrich I;
 XX
 DR WPI; 2003-533029/50.

XX
 PT Detecting and differentiating cytosine methylation state of genomic DNA,
 PT useful for diagnosing, treating prognosticating and/or monitoring lung
 PT cell proliferative disorders e.g. adenocarcinoma and squamous cell
 PT carcinoma.
 XX

PS Claim 11; SEQ ID NO 413; 58pp; English.
 XX
 CC This invention relates to a novel method for detecting and
 CC differentiating between lung cell proliferative disorders associated with
 CC at least one gene and/or their regulatory regions. Specifically, it
 CC refers to a method comprising contacting a target nucleic acid in a
 CC biological sample with at least one reagent, wherein the reagent is able
 CC to distinguish between methylated and non-methylated CpG dinucleotides
 CC present in the target DNA. As such, it is possible to further
 CC differentiate and diagnose medical conditions including adenocarcinoma
 CC and squamous cell carcinoma, and their respective adjacent lung tissue.
 CC The present invention describes cytostatic oligomers and PNA-oligomers
 CC that are useful as probes for determining the cytosine methylation state
 CC or single nucleotide polymorphisms (SNPs) of the target sequence. This
 CC oligonucleotide sequence is a primer oligomer used for the amplification

CC of pretreated DNA (i.e. where unmethylated cytosine bases are converted
 CC to uracil), used in an exemplification of the invention.
 XX
 SQ Sequence 20 BP; 0 A; 11 C; 0 G; 9 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 1e+03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1422 AGAGGAGACAAAGAG 1438
 |||||
 Db 17 AGGGGAGAGAGAGAG 1

RESULT 1091
 ADC6927/c
 ID ADC6927 standard; DNA; 20 BP.
 XX
 AC ADC6927;
 XX
 DT 18-DEC-2003 (first entry)
 XX
 DE Primer oligo used to amplify pretreated genomic DNA (SeqID 316).
 XX
 KW PCR; primer; ss; lung cell proliferative disorder; CpG dinucleotide;
 KW adenocarcinoma; squamous cell carcinoma; cytostatic; probe; PNA-oligomer;
 KW cytosine methylation state.
 XX
 OS Unidentified.

WO2003052135-A2.
 XX
 XX 26-JUN-2003.
 XX
 XX 10-DEC-2002; 2002WO-EP014026.
 XX
 XX 14-DEC-2001; 2001DE-01061625.
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 PI Burger M, Field JK, Genc B, Liloglou T, Lipscher E, Maier S;
 PI Nimrich I;
 XX
 DR WPI; 2003-533029/50.

XX
 PT Detecting and differentiating cytosine methylation state of genomic DNA,
 PT useful for diagnosing, treating prognosticating and/or monitoring lung
 PT cell proliferative disorders e.g. adenocarcinoma and squamous cell
 PT carcinoma.
 XX

PS Claim 11; SEQ ID NO 316; 58pp; English.
 XX
 CC This invention relates to a novel method for detecting and
 CC differentiating between lung cell proliferative disorders associated with
 CC at least one gene and/or their regulatory regions. Specifically, it
 CC refers to a method comprising contacting a target nucleic acid in a
 CC biological sample with at least one reagent, wherein the reagent is able
 CC to distinguish between methylated and non-methylated CpG dinucleotides
 CC present in the target DNA. As such, it is possible to further
 CC differentiate and diagnose medical conditions including adenocarcinoma
 CC and squamous cell carcinoma, and their respective adjacent lung tissue.
 CC The present invention describes cytostatic oligomers and PNA-oligomers
 CC that are useful as probes for determining the cytosine methylation state
 CC or single nucleotide polymorphisms (SNPs) of the target sequence. This
 CC oligonucleotide sequence is a primer oligomer used for the amplification
 CC of pretreated DNA (i.e. where unmethylated cytosine bases are converted
 CC to uracil), used in an exemplification of the invention.
 XX

SQ Sequence 20 BP; 8 A; 0 C; 7 G; 5 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.8; DB 1; Length 20;
 Best Local Similarity 88.2%; Pred. No. 1e+03; 2; Indels 0; Gaps 0;
 Matches 15; Conservative 0; Mismatches 2;

QY 95 TCTGTTACTACTACGAC 111
 ||| ||| ||| ||| ||| |||
 Db 20 TCTCTTACTACTACTAC 4

RESULT 1092
 ADC18724
 ID ADC18724 standard; DNA; 20 BP.
 XX
 AC ADC18724;
 XX
 DT 18-DEC-2003 (first entry)
 XX
 DE Rat RT-PCR primer 26 used for amplification of VCAM-1 gene.
 XX
 KW aldosterone receptor antagonist; non-steroidal anti-inflammatory drug;
 KW NSAID; cardiovascular disorder; inflammation; prostaglandin production;
 KW anti-inflammatory drug; ulcer;
 KW human arachidonic acid/prostaglandin pathway; cyclooxygenase; COX; COX-2;
 KW prostaglandin G/H synthase II; combination therapy; cardiovascular-gen;
 KW hypotensive; cardiant; antiarteriosclerotic; thrombolytic;
 KW cerebroprotective; antianginal; vasotropic; antinflammatory;
 KW immunomodulator; dermatological; hypertension; heart failure;
 KW coronary artery disease; aneurysm; arteriosclerosis; atherosclerosis;
 KW myocardial infarction; embolism; stroke; thrombosis; angina;
 KW vascular plaque inflammation; vascular plaque rupture; Kawasaki disease;
 KW calcification; inflammation-related disorder; ss; rat;
 KW vascular cell adhesion molecule -1; VCAM-1; RT-PCR;
 KW reverse transcription PCR; PCR; primer.
 XX
 OS Rattus sp.
 XX
 PN WO2003063908-A1.
 XX
 PD 07-AUG-2003.
 XX
 PF 30-JAN-2003; 2003WO-US002923.
 XX
 PR 30-JAN-2002; 2002US-0353008P.
 XX
 PA (PHAA) PHARMACIA CORP.
 XX
 PI McMahon EG, Rocha R;
 XX
 DR WPI; 2003-697387/66.
 XX
 PT Combination used for treating cardiovascular disorder e.g. hypertension
 PT comprises aldosterone receptor antagonist and non-steroidal
 PT antiinflammatory drug.
 XX
 PS Disclosure; Page 76; 79pp; English.

This invention relates to an aldosterone receptor antagonist and a non-steroidal anti-inflammatory drug (NSAID) for use in the treatment of cardiovascular disorders. Prostaglandins play a major role in the inflammation process and the inhibition of prostaglandin production and have been the target of anti-inflammatory drug discovery. Common NSAIDs, however, are also active in other prostaglandin-regulated processes and can produce severe side-effects such as life-threatening ulcers. NSAIDs prevent prostaglandin production by inhibiting enzymes in the human arachidonic acid/prostaglandin pathway including cyclooxygenase (COX). A novel inducible enzyme associated with inflammation has been described, termed COX-2 or prostaglandin G/H synthase II, which is a novel target for drug therapy. It has been suggested that inflammation plays a role in cardiovascular disease. The present invention therefore proposes an aldosterone receptor antagonist and NSAID for the combination therapy treatment for cardiovascular disease. The invention may have cardiovascular-gen, hypotensive, cardiant, antiarteriosclerotic, thrombolytic, cerebroprotective, antianginal, vasotropic, antinflammatory, immunomodulator or dermatological activities. The invention may be useful for the treatment of a cardiovascular disorder (for example hypertension, heart failure, coronary artery disease,

CC aneurysm, arteriosclerosis, atherosclerosis, myocardial infarction,
 CC embolism, stroke, thrombosis, angina, vascular plaque inflammation,
 CC vascular plaque rupture, Kawasaki disease, calcification and
 CC inflammation) and inflammation-related disorders occurring in tissues or
 CC organs, for example heart, brain and kidney. The synergistic combination
 CC of aldosterone receptor antagonist and NSAID is effective and well
 CC tolerated during therapy. The present sequence is that of an RT-PCR
 CC primer which was used for amplification of the rat vascular cell adhesion
 CC molecule -1 (VCAM-1) gene during the exemplification of the invention.
 XX
 SQ Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 20;

Best Local Similarity 88.2%; Pred. No. 1e+03; Mismatches 0; Gaps 0;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 787 AAGCCGGTCATGTCAC 803

Db 2 AAGCCGGTCATGTCAC 18

RESULT 1093

ACF79539/c

ID ACF79539 standard; DNA; 20 BP.

XX

AC ACF79539;

XX

DT 18-DEC-2003 (first entry)

XX

DE Human E-cadherin repressed clone 1a probe.

XX

KW Human; E-cadherin repressed clone 1a; hECEp1a; tumour; marker;

KW cytostatic; gene therapy; probe; ss.

XX

OS Homo sapiens.

XX

PN WO2003070759-A2.

XX

PD 28-AUG-2003.

XX

PF 18-FEB-2003; 2003WO-EP001683.

XX

PR 20-FEB-2002; 2002EP-00075657.

XX

PA (VLA-) VLAAMS INTERUNIVERSITAIR INST BIOTECHNOG.

XX

PI Van Roy F, Berx G, Strumane K;

XX

DR WPI; 2003-697600/66.

XX

PT Use of protein or gene, useful for modulating E-cadherin-mediated cell
 PT adhesion, as a tumor marker, in determining the invasive and metastatic
 PT capacity of a tumor or in screening compounds limiting tumor progression
 PT and/or metastasis.

XX

PS Example; Page 17; 77pp; English.

XX

CC The present sequence is a probe for human E-cadherin repressed clone 1a
 CC (hECEp1a), and was used in an S1 nuclease protection assay. An hECEp1
 CC protein, or a gene encoding it, can be used: (1) to modulate E-cadherin-
 CC mediated cell adhesion; (2) as a tumour marker; (3) to determine the
 CC invasive and metastatic capacity of a tumour; and (4) to screen compounds
 CC limiting tumour progression and/or metastasis. hECEp1 expressing
 CC mammalian cells are useful for screening compounds that restore cell
 CC adhesion and/or inhibit invasiveness (all claimed)

XX

SQ Sequence 20 BP; 1 A; 7 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 20;

Best Local Similarity 88.2%; Pred. No. 1e+03;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1245 CGATGAGGACGAGACG 1261

SQ Sequence 20 BP; 7 A; 3 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 20;

Best Local Similarity 88.2%; Pred. No. 1e+03; 2; Indels 0; Gaps 0;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 523 AATGATATCGTCTTGGC 539

DB 3 AAGGATATCATCTTGGC 19

RESULT 1096

ADE10132/c

ID ADE10132 standard; DNA; 20 BP.

XX AC ADE10132;

XX DT 29-JAN-2004 (first entry)

XX DE PCR primer #2 for human caldesmon DNA.

XX KW Human; vasculogenic progenitor cell;

XX KW undifferentiated embryonic stem cell; ES cell; differentiation;

XX KW vascular disease; congenital vascular disorder;

XX KW acquired vascular disorder; ischaemia reperfusion injury;

XX KW haematological disease; congenital blood disorder;

XX KW acquired blood disorder; clotting disorder; neoplastic disease;

XX KW vasotropic; haemostatic; cytostatic; caldesmon; PCR; primer; ss.

XX OS Homo sapiens.

XX PN US2003194802-A1.

XX PD 16-OCT-2003.

XX PF 05-AUG-2002; 2002US-00211522.

XX PR 16-APR-2002; 2002US-0372429P.

XX PA (TECR) TECHNION RES & DEV FOUND LTD.

XX PI Itskovitz-Eldor J, Gerecht-Nir S;

XX DR WPI; 2003-844458/78.

XX CC Preparing vasculogenic progenitor cells from undifferentiated ES cells

XX CC for treating vascular or hematopoietic diseases by culturing individual

XX CC undifferentiated ES cells to induce differentiation into vasculogenic

XX CC progenitor cells.

XX PS Example; Page 15; 34pp; English.

XX CC The present invention relates to a method for preparing human

XX CC vasculogenic progenitor cells from undifferentiated embryonic stem (ES)

XX CC cells. The method comprises culturing individual undifferentiated ES

XX CC cells in a manner suitable for inducing differentiation of the

XX CC undifferentiated ES cells into vasculogenic progenitor cells, thus

XX CC obtaining a mixed population of cells. The method and cells are useful

XX CC for relieving or preventing vascular diseases or conditions (e.g.

XX CC congenital vascular disorders, acquired vascular disorders or

XX CC ischaemia/perfusion injury), haematological diseases or conditions

XX CC (e.g. congenital blood disorders, acquired blood disorders, clotting

XX CC disorders) and neoplastic diseases. The present sequence represents a PCR

XX CC primer used in the method of the present invention.

XX SQ Sequence 20 BP; 1 A; 5 C; 5 G; 5 T; 0 U; 0 Other;

Query Match

Best Local Similarity 88.2%; Score 13.8; DB 1; Length 20;

Matches 15; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 429 GAAACTTAATAGCAGC 445

||||| ||| |||||

DB 17 GAAACGTAACAGCAGC 1

RESULT 1097

ADE37787/c

ID ADE37787 standard; DNA; 20 BP.

XX AC ADE37787;

XX DT 29-JAN-2004 (first entry)

XX DE Human TPEF PCR primer SEQ ID NO:33.

XX KW chemically pretreated genomic DNA; human; versican; TPEF; H-cadherin;

XX KW calcitonin; EYA4; cytostatic; gene therapy;

XX KW colon cell proliferative disorder; cytosine methylation state;

XX KW single nucleotide polymorphism; SNP; disease analysis; CpG dinucleotide;

XX KW PCR primer; ss.

XX OS Synthetic.

XX OS Homo sapiens.

XX PN WO2003072820-A2.

XX PD 04-SEP-2003.

XX PF 27-FEB-2003; 2003WO-EP002034.

XX PR 27-FEB-2002; 2002EP-00004551.

XX PA (EPIG-) EPIGENOMICS AG.

XX PI Adorjan P, Burger M, Maier S, Lesche R, Cottrell S, Mooney S;

XX DR WPI; 2003-731619/69.

XX CC New nucleic acid comprising a sequence of at least 18 bases in length of

XX CC a segment of the chemically pretreated genomic DNA, useful for treating

XX CC colon cell proliferative disorders.

XX PS Example 13; SEQ ID NO 33; 147pp; English.

XX CC The present invention describes a nucleic acid (I) comprising a sequence

XX CC of at least 18 bases in length of a segment of the chemically pretreated

XX CC genomic DNA of any of the 5 sequences of 965, 16579, 3000, 1984, or 7833

XX CC bp, which represent human versican, TPEF, H-cadherin, calcitonin and EYA4

XX CC respectively (see ADE37755 to ADE37759), or its complement. Also

XX CC described: (1) an oligomer, in particular an oligonucleotide or peptide

XX CC nucleic acid (PNA)-oligomer comprising in each case of at least one base

XX CC sequence having a length of at least 9 nucleotides which is complementary

XX CC to, or hybridises under moderately stringent or stringent conditions to a

XX CC pretreated genomic DNA; (2) a set of oligomers comprising at least two of

XX CC the oligomer of (1); (3) manufacturing an arrangement of different

XX CC oligomers (array) fixed to a carrier material; (4) an array of different

XX CC oligonucleotide- and/or PNA-oligomer sequences, which are arranged on a

XX CC plane solid phase in the form of a rectangular or hexagonal lattice; (5)

XX CC a composition of matter comprising the nucleic acid and a buffer

XX CC comprising 1-5 mM magnesium chloride, 100-500 micromole dNTP, 0.5-5 units

XX CC of taq polymerase, and the oligomer; (6) detecting, differentiating or

XX CC distinguishing between colon cell proliferative disorders; and (7)

XX CC detecting a colon cell proliferative disorder. (I) has cytostatic

XX CC activity, and can be used in gene therapy. The versican, TPEF, H-

XX CC cadherin, calcitonin and EYA4 genes, and the polypeptides expressed by

XX CC them, can be used for detecting, differentiating or distinguishing

XX CC between colon cell proliferative disorders. The oligomers are useful for

XX CC detecting the cytosine methylation state and/or single nucleotide

XX CC polymorphisms (SNPs) within nucleic acid sequences. The array is useful

XX CC for analysing diseases associated with the methylation state of the CpG

XX CC dinucleotides. The present sequence is used in the exemplification of the

XX CC present invention.

XX SQ Sequence 20 BP; 0 A; 11 C; 0 G; 9 T; 0 U; 0 Other;


```

ID AAQ41635 standard; cDNA; 21 BP.
XX
AC AAQ41635;
XX
DT 25-MAR-2003 (revised)
DT 26-AUG-1993 (first entry)
XX
XX TGF-beta2 antisense strand (nucleotides 237-217) PCR primer.
DE
XX hTGF-beta2; Transforming Growth Factor; hybrid protein; wound healing;
KW cancer treatment; bone repair; growth regulation;
KW polymerase chain reaction; ss.
XX
OS Synthetic.
XX
XX EP542679-A1.
FN
XX 19-MAY-1993.
XX
XX 03-NOV-1992; 92EP-00810845.
PF
XX 11-NOV-1991; 91EP-00810870.
FR
XX (CIBA ) CIBA GEIGY AG.
PA
XX McMaster GK, Cox D, Cerletti N, Kuhla J;
PI
XX WPI; 1993-161126/20.
DR
XX New hybrid transforming growth factor-beta molecules - comprise portions
PT of mature TGF-beta isoforms; useful as wound healants, cardioprotective,
PT antiinflammatory and immunosuppressive agents etc.
XX
XX Example 1; Page 42; 48pp; English.
PS
XX The invention covers hybrid TGF-beta molecules consisting of parts of the
CC human isoforms TGF-beta1, TGF-beta2 and TGF-beta3 (see AAQ41599, AAQ41600
CC and AAQ41601, respectively). Hybrid cDNAs coding for these hybrid TGF-
CC beta polypeptides were constructed from the appropriate, PCR-amplified
CC segments of the wild-type isoforms. For the construction of hybrid DNA
CC molecules encoding TGF-beta hybrids all having the hinge points between
CC amino acids 79 and 80, the primers AAQ41632-Q41637 (corresp. to the hinge
CC regions) were used with the appropriate primers (see AAQ41608-Q41613)
CC which flank the regions coding for each of the three full-length mature
CC TGF-beta isoforms. See also AAQ41602-Q41643. (Updated on 25-MAR-2003 to
CC correct PN field.)
XX
SQ Sequence 21 BP; 9 A; 5 C; 7 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 324 CAGCAAGCAGATGCAGA 340
Db ||||| ||| |||||
5 CAGCAAGGAGAGAGAGA 21

RESULT 1101
AAQ72965/c
ID AAQ72965 standard; DNA; 21 BP.
XX
AC AAQ72965;
XX
XX 25-MAR-2003 (revised)
DT 28-JUN-1995 (first entry)
XX
XX LCMV glycoprotein transgene detection primer #2.
DE
XX Primer; amplify; PCR; transgene; CD28 receptor; ligand; B7; rat; mouse;
KW insulin; promoter; termination codon; polyadenylation signal; oocyte;
KW transgenic; probe; transgenic animal; insulinitis; diabetes;
KW pancreatic islet lymphocytic infiltrate; type I diabetes; thyroiditis;

KW AAQ41635 standard; cDNA; 21 BP.
KW
XX
XX AAQ41635;
OS Synthetic.
XX
XX WO9423760-A1.
PN
XX 27-OCT-1994.
PD
XX 17-FEB-1994; 94WO-US001674.
PF
XX 14-APR-1993; 93US-00048042.
PR
XX (USNA ) US SEC OF NAVY.
PA
XX Harlan DM, June CH;
PI
XX WPI; 1994-341499/42.
DR
XX Transgene contg. DNA encoding CD28 ligand and tissue-specific promoter -
PT and transgenic animals serving as models for specific auto:immune
PT diseases, e.g. diabetes.
XX
XX Example 2; Page 24; 52pp; English.
PS
XX Primers (AAQ72964-9) were used to amplify and detect the expression of a
CC series of transgenes comprising DNA sequences linked to mouse tissue
CC specific promoters. The DNA sequences encode: (i) the CD28 receptor
CC stimulating ligand, B7, (see AAQ72961-3); (ii) the lymphocytic
CC choriomeningitis virus (LCMV) glycoprotein (GP) or (iii) a T-cell
CC receptor specific for the LCMV-GP peptide 33-41. The transgenes (i and
CC ii) were expressed on pancreatic beta cells. Transgene (iii) was
CC expressed in T-cells. The triple transgenic animals will spontaneously
CC develop pancreatic islet lymphocytic infiltrate (insulinitis) and diabetes.
CC The animals may be used to study diseases such as Type I diabetes,
CC psoriasis, thyroiditis, sarcoidosis, multiple sclerosis, aplastic anaemia
CC and inflammatory bowel disease. (Updated on 25-MAR-2003 to correct PN
CC field.)
XX
SQ Sequence 21 BP; 4 A; 7 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 789 GCCGGTCATGTCCTCAAG 805
Db ||||| ||||| |||||
19 GCGGTTTCATGTCCTCAAG 3

RESULT 1102
AAQ70357
ID AAQ70357 standard; DNA; 21 BP.
XX
XX AAQ70357;
AC
XX 25-MAR-2003 (revised)
DT 15-FEB-1995 (first entry)
XX
XX Antisense oligonucleotide for human FGF.
DE
XX Fibroblast growth factor; hybridisation; laser procedures;
KW vascular smooth muscle cell; proliferation; SMC; vascular stenosis;
KW post angioplasty restenosis; atherosclerosis; cardiac hypertrophy;
KW organ transplant; ss.
XX
XX Synthetic.
OS
XX WO9415945-A1.
PN
XX 21-JUL-1994.
PD
XX 28-DEC-1993; 93WO-US012600.
PF

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XX PR 31-DEC-1992; 92US-00999706.
XX PA (TEXA-) TEXAS BIOTECHNOLOGY CORP.
XX PI Denner LA, Rege AA, Dixon RA;
XX PR WPI; 1994-249123/30.
XX DR
XX PR New anti-sense polynucleotide(s) to fibroblast growth factor receptor -
XX PT used for inhibiting vascular smooth muscle cell proliferation, partic.
XX PT for treating restenosis.
XX PS Claim 3; Page 10; 53pp; English.
XX CC The sequence is an antisense molecule directed against position -3 to
XX CC +18, relative to the start codon of the gene for human fibroblast growth
XX CC factor 1. The polynucleotide can be used for inhibiting vascular smooth
XX CC muscle cell proliferation and for treating a disease e.g. vascular
XX CC stenosis, post angioplasty restenosis, atherectomy, atherosclerosis,
XX CC atrial venous shunt failure, cardiac hypertrophy, vascular surgery and
XX CC organ transplant. See also AAQ70333-60. (Updated on 25-MAR-2003 to
XX CC correct PN field.)
XX SQ Sequence 21 BP; 4 A; 11 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1082 ATTTCAGCTCCACATC 1098
Db 3 ACTTCAGCTCCACATC 19

RESULT 1103
AAQ99586/c
ID AAQ99586 standard; cDNA; 21 BP.
XX AC AAQ99586;
XX DT 25-MAR-2003 (revised)
XX DT 30-APR-1996 (first entry)
XX DE Human TPO sense primer hTPO-KU.
XX KW Thrombopoietin; TPO; humoral factor; platelet; antibody; therapy; AIDS;
XX KW thrombocytopenia; hypoplastic anaemia; thrombotic thrombocytopenia;
XX KW disseminated intravascular coagulation syndrome; PCR; primer; amplify;
XX KW polymerase chain reaction; rat; human; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT misc_feature 1..21
XX FT /*tag= a
XX FT /note= "corresponds to bases 901 to 921 of AAQ99553"
XX PN W09521919-A2.
XX XX
XX PD 17-AUG-1995.
XX XX
XX PF 14-FEB-1995; 95WO-JP000208.
XX PR 14-FEB-1994; 94JP-00039090.
XX PR 14-MAR-1994; 94US-00212164.
XX PR 25-MAR-1994; 94JP-00079842.
XX PR 01-APR-1994; 94US-00221020.
XX PR 01-JUN-1994; 94JP-00155126.
XX PR 15-JUN-1994; 94JP-00167328.
XX PR 20-JUL-1994; 94US-00278083.
XX PR 17-AUG-1994; 94JP-00193169.
XX PR 17-AUG-1994; 94JP-00227159.

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PR 18-AUG-1994; 94JP-00193916.
PR 11-OCT-1994; 94US-00320300.
PR 01-NOV-1994; 94JP-00304167.
PR 01-DEC-1994; 94JP-00298669.
PR 22-DEC-1994; 94US-00361811.
PR 28-DEC-1994; 94JP-00341200.
PR 31-JAN-1995; 95US-00318478.
XX (KIRI ) KIRIN BREWERY KK.
XX PA
XX PI Miyazaki H, Kato T, Ohgami K, Iwamatsu A, Akahori H, Kuroki R;
XX PI Shimizu T, Muto T;
XX PR WPI; 1995-293120/38.
XX DR
XX PT Thrombopoietin polypeptide which specifically stimulates or increases
XX PT platelet production - useful in treatment of thrombocytopenia, also
XX PT related DNA and vectors.
XX PS Example 21; Page 131; 383pp; English.
XX CC This sequence represents an anti-sense primer based on a region of the
XX CC full length human thrombopoietin (TPO) cDNA (see AAQ99553). By using this
XX CC primer on the DNA of a human liver cDNA library (hTPO-Fl) the clone pH1Fl
XX CC containing the TPO sequence was obtained. TPO is a humoral factor capable
XX CC of promoting platelet production. The protein encoded by the full length
XX CC sequence can be purified by using a gel affinity column where Mpl has
XX CC been coupled to a resin. AAQ99552 and AAQ99553 also encode TPO proteins.
XX CC The DNA sequences are inserted into vectors which are used to transform
XX CC prokaryotic and eukaryotic host cells. Using the proteins encoded by
XX CC these sequences, and derivatives of them, antibodies specifically
XX CC immunoreactive with a TPO protein can be created. The antibodies, DNA
XX CC sequences and vectors are used to isolate the protein sequences. The TPO
XX CC proteins can then be used in the treatment of platelet disorders. These
XX CC include thrombocytopenia, hypoplastic anaemia, AIDS, disseminated
XX CC intravascular coagulation syndrome and thrombotic thrombocytopenia.
XX CC (Updated on 25-MAR-2003 to correct PR field.)
XX SQ Sequence 21 BP; 6 A; 0 C; 12 G; 3 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1555 TTCTTCCCAACCCCTC 1571
Db 19 TCCTTCCCAACCCATC 3

RESULT 1104
AAT44287
ID AAT44287 standard; DNA; 21 BP.
XX AC AAT44287;
XX DT 22-JUL-1997 (first entry)
XX DE 5'-Guanosine-capped anti-c-myb antisense oligonucleotide 11.
XX KW Antisense therapy; c-myb; oncogene; guanosine; 3'-cap; 5'-cap;
XX KW nuclease resistance; stability; anticancer; ss.
XX OS Synthetic.
XX FH Key Location/Qualifiers
XX FT misc_feature 1..3
XX FT /*tag= a
XX FT /function= "cap"
XX FT /note= "all 3 nucleotides are linked by P=S bonds"
XX FT misc_feature 4..21
XX FT /*tag= b
XX FT /label= anti-c-myb oligonucleotide
XX FT /note= "the bonds between nucleotides 5-6, 7-8, 13-14 14-

```

FT 15, 15-16, 19-20 and 20-21 are all phosphorothioate (P-S)
 FT linkages"
 XX
 PN DE19502912-A1.
 XX
 PD 01-AUG-1996.
 XX
 PF 31-JAN-1995; 95DE-01002912.
 XX
 PR 31-JAN-1995; 95DE-01002912.
 XX
 PA (FARH) HOECHST AG.
 XX
 PI Peyman A, Uhlmann E;
 XX
 DR WPI; 1996-355223/36.
 XX
 XX Oligo:nucleotide(s) with series of G residues at at least one end have
 PT increased stability against nuclease and cell penetration, - are partic.
 PT anti:sense sequences for treating and diagnosing cancer, viral diseases
 PT etc.
 XX
 PS Disclosure; Page 8; 15pp; German.
 XX
 CC Ten- to 40-mer oligonucleotides which have a cap of 1-10 (esp. 4) G
 CC residues on at least one end are provided; if caps are present at both
 CC ends, they can be of the same or different lengths. A cap sequence
 CC increases nuclease resistance of the oligonucleotide and also increases
 CC cell penetration. Phosphorothioate linkages also help to increase
 CC resistance to nucleases. The present sequence is an example of a capped
 CC oligonucleotide which can be used in anticancer therapy
 XX
 SQ Sequence 21 BP; 0 A; 5 C; 12 G; 4 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.8; DB 1; Length 21;
 Best Local Similarity 88.2%; Pred. No. 1.1e+03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1854 GGGGTGGCTGGGTCTTC 1870
 Db ||||| ||||| ||||| |||||
 1 GGGGTGCCGGGTCTTC 17
 RESULT 1105
 AAX24141
 ID AAX24141 standard; DNA; 21 BP.
 XX
 AC AAX24141;
 XX
 DT 01-JUL-1999 (first entry)
 XX
 DE c-myb directed phosphonomonoester oligonucleotide analogue 1.
 XX
 KW Phosphonomonoester analogue; inhibitor; antisense; cancer; restenosis;
 KW ribozyme; diagnostic agent; detection; treatment; disease; virus;
 KW integrin; cell-cell adhesion receptor; TNF-alpha; c-myb; ss.
 XX
 OS Synthetic.
 OS
 XX DE19508923-A1.
 XX
 XX 19-SEP-1996.
 PD
 XX
 PF 13-MAR-1995; 95DE-01008923.
 XX
 PR 13-MAR-1995; 95DE-01008923.
 XX
 XX (FARH) HOECHST AG.
 PA
 PI Anuschirwan P, Uhlmann E, Breipohl G, Wallmeier H;
 XX
 DR WPI; 1996-425893/43.
 DR
 XX

PT New oligo:nucleotide analogues contg. phospho:mono:ester bridges - for
 PT therapeutic inhibition of gene expression, e.g. in cancer or viral
 PT infection, with good specificity and in vivo stability.
 XX
 PS Disclosure; Page 19; 36pp; German.
 XX
 CC This invention describes novel phosphonomonoester oligonucleotide
 CC analogues which act as inhibitors of gene expression (as sense/antisense,
 CC ribozyme or triplex-forming molecules), useful as diagnostic agents (i.e.
 CC probes for detecting nucleic acid) or for treatment of diseases caused by
 CC viruses, influenced by integrins or cell-cell adhesion receptors, induced
 CC by factors such as TNF-alpha, or cancer or restenosis. The products of
 CC the invention satisfy the requirements of good in-vivo stability; ability
 CC to cross cellular and nuclear membranes, and specific binding to target
 CC nucleic acid better than known oligonucleotides
 XX
 SQ Sequence 21 BP; 0 A; 5 C; 12 G; 4 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.8; DB 1; Length 21;
 Best Local Similarity 88.2%; Pred. No. 1.1e+03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1854 GGGGTGGCTGGGTCTTC 1870
 Db ||||| ||||| ||||| |||||
 1 GGGGTGCCGGGTCTTC 17
 RESULT 1106
 AAT35036
 ID AAT35036 standard; DNA; 21 BP.
 XX
 AC AAT35036;
 XX
 DT 18-FEB-1997 (first entry)
 XX
 DE Triplex-forming oligonucleotide targeting HSV-1 IR-L.
 XX
 KW HBV; oligodeoxyribonucleotide; homopurine-homopyrimidine target; block;
 KW in vitro; DNA synthesis; DNA polymerase; Sequenase3; Taq; Vent; Pol I;
 KW accessory replication protein; SSB protein; sequence-specific;
 KW triplex-forming oligonucleotide; exon 3; inverted repeat; IR110;
 KW hepatitis B virus; P gene; ss.
 XX
 OS Synthetic.
 OS
 XX WO9618732-A2.
 PN
 XX 20-JUN-1996.
 PD
 XX 14-DEC-1995; 95WO-US016368.
 PF
 XX 15-DEC-1994; 94US-00358089.
 PR
 XX (UNITI) UNIV ILLINOIS FOUND.
 PA
 XX Mirkin SM, Samadashwily GM;
 PI
 XX WPI; 1996-300649/30.
 DR
 XX
 PT Sequence specific inhibition of DNA synthesis - by triplex-forming
 PT oligo:nucleotide(s), for detection of oncogene mutation(s) and treatment
 PT of e.g. HSV, Hepatitis C and Papillomavirus infection.
 XX
 PS Example 2; Page 40; 78pp; English.
 XX
 CC Specifically designed oligodeoxyribonucleotides form triplexes in single-
 CC or double-strand DNA at homopurine-homopyrimidine targets. These
 CC triplexes block in vitro DNA synthesis by all DNA polymerases studied,
 CC including Sequenase3, Taq, Vent, and Pol I. A similar phenomenon occurs
 CC when DNA polymerases are supplemented with accessory replication
 CC proteins, including SSB protein. Replication blockage is highly sequence-
 CC specific and even one or two point substitutions within either the target
 CC sequence or the oligonucleotide abolish the effect. Sequence-specific


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XX PD 17-FEB-1998.
XX PF 17-FEB-1994; 94US-00197790.
XX PR 14-APR-1993; 93US-00048042.
XX PA (USNA ) US SEC OF NAVY.
XX PI Harlan DM, June CH;
XX WPI; 1998-158756/14.
XX PT Production of diabetic rodent model - comprising transgenic rodent whose
XX PT islets express B7 polypeptide.
XX PS Example 2; Col 19; 30pp; English.
XX CC AAV09768 and AAV09769 are PCR primers used to amplify a lymphocytic
XX CC choriomeningitis virus (LCMV) glycoprotein (gp) transgene from a triple
XX CC transgenic mouse which expresses a B7 transgene and the LCMV gp transgene
XX CC on pancreatic beta cells. This gene is used in a method which allows the
XX CC construction of a transgenic mouse model of Type I diabetes for
XX CC facilitating the screening of therapeutic agents. The transgenic rodent
XX CC has a transgene operable in insulin-producing pancreatic beta cells which
XX CC comprises a DNA sequence encoding the T lymphocyte CD28 receptor
XX CC stimulating ligand, B7, and a promoter operably linked to the sequence
XX CC allowing the expression of B7
XX SQ Sequence 21 BP; 4 A; 7 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 789 GCCGTCATGTCTCAAG 805
DB 19 GCGGTTTCATGTCTCAAG 3

RESULT 1110
AAV61608/c
ID AAV61608 standard; DNA; 21 BP.
AC AAV61608;
XX 02-DEC-1998 (first entry)
XX Regulatory element containing oligonucleotide #143.
XX Cytokine-responsive regulatory; primer; promoter; detection; isolation;
XX transcriptional control; STAT protein; screening; agonist; ss.
XX Synthetic.
XX US5814517-A.
XX 29-SEP-1998.
XX 27-MAR-1995; 95US-00410779.
XX 14-APR-1994; 94US-00228935.
XX (LIGA-) LIGAND PHARM INC.
XX Lamb IP, Seidel HM;
XX WPI; 1998-541763/46.
XX DNA constructs containing cytokine-responsive regulatory elements -
XX useful in assays for transcription-regulating proteins or gene
XX transcription agonists or antagonists.

PS Example 3; Col 30; 58pp; English.
XX AAV56842-V56976 and AAV61601-V61631 are oligonucleotides used in the
XX CC production of constructs comprising a cytokine-responsive regulatory
XX CC element linked to a promoter which is linked to a heterologous coding
XX CC sequence so that the coding sequence is under the transcriptional control
XX CC of the regulatory element and the promoter, where the regulatory element
XX CC has a nucleotide sequence selected from TTCNGAA, TTANYTAA, and TTCNYTAA
XX CC where N is A, T, C or G, and Y = 3 or 4. The constructs can be used to
XX CC detect or isolate transcription-regulating proteins, e.g. STAT proteins,
XX CC in a sample by contacting the sample with the construct so that the
XX CC protein binds to the regulatory element, and detecting or separating the
XX CC resulting complex. The cells can be used in screening assays for agonists
XX CC of gene transcription, in which the level of expression of the coding
XX CC sequence is measured in the presence and absence of a test compound or in
XX CC the presence of the corresponding cytokine
XX SQ Sequence 21 BP; 3 A; 4 C; 7 G; 7 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 674 ACTTCCCGAGAACTGGG 690
DB 20 ACTTCCCGAGAACAGAG 4

RESULT 1111
AAV40281
ID AAV40281 standard; DNA; 21 BP.
AC AAV40281;
XX 13-OCT-1998 (first entry)
XX Human equilibrative nucleoside transporter 1 PCR antisense primer A2.
XX Rat; human; equilibrative nucleoside transporter; hENT1; hENT2; rENT1;
XX rENT2; coronary; cerebrovascular anoxia; viral infection; cancer;
XX PCR primer; ss.
XX Synthetic.
XX Homo sapiens.
XX WO9829437-A2.
XX 09-JUL-1998.
XX 30-DEC-1997; 97WO-IB001657.
XX 30-DEC-1996; 96US-0034083P.
XX 03-NOV-1997; 97US-0064004P.
XX (UYAL-) UNIV ALBERTA.
XX (UYLE-) UNIV LEEDS.
XX Young JD, Cass CE, Baldwin SA;
XX WPI; 1998-388035/33.
XX Newly isolated equilibrative nucleoside transporter protein(s) and
XX gene(s) - used to develop products for treating disorder(s) associated
XX with the transporter(s) and for use with nucleoside drug(s).
XX Claim 58; Page 37; 97pp; English.
XX The present sequence represents a PCR primer used in an example from the
XX present invention to obtain rat equilibrative nucleoside transporter
XX (ENT), where the primer is derived from human ENT1. ENTs can transport a
XX variety of purines and pyrimidines, including adenosine, uridine,
XX guanosine, inosine, formycin B, tubercidin, and thymidine. ENTs are
XX bidirectional, they transport a suitable permeant both into and out of

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CC cells. ENTs can be used as a tool for the development of new nucleoside
 CC drugs. Products from the present invention can be used for treating a
 CC subject having a disorder associated with an ENT. They can also be used
 CC with nucleoside drugs in the treatment of e.g. coronary or
 CC cerebrovascular anoxia, viral infection or cancer. The products (e.g.
 CC antibodies and oligonucleotides hybridising to nucleic acid sequences
 CC encoding ENTs) can also be used for detection and drug screening
 XX
 SQ Sequence 21 BP; 3 A; 5 C; 6 G; 7 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.8; DB 1; Length 21;
 Best Local Similarity 88.2%; Pred. NO. 1.1e+03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 500 AGGCATCTGGCTTCTGT 516
 Db 4 AGGCACCTGGTTCTGT 20
 RESULT 1112
 AAZ226069
 ID AAZ226069 standard; DNA; 21 BP.
 XX
 AC AAZ226069;
 XX
 DT 30-NOV-1999 (first entry)
 XX
 DE Human polymorphic region 258.
 XX
 KW Polymorphism; human; inhibitor; cancer; treatment; cell growth; LOH;
 KW cell viability; loss of heterozygosity; precancerous condition; ASI;
 KW allele specific inhibitor; somatic cell; diagnosis; prevention;
 KW atherosclerotic plaque; premalignant metaplastic lesion; endometriosis;
 KW dysplastic lesion; benign tumour; polycystic kidney disease; transplant;
 KW graft versus host disease; malignant cell removal; bone marrow; ss.
 XX
 OS Homo sapiens.
 XX
 XX WC9841648-A2.
 XX 24-SEP-1998.
 XX 19-MAR-1998; 98WO-US005419.
 XX 20-MAR-1997; 97US-0041057P.
 XX (VARI-) VARIAGENICS INC.
 XX Housman D, Ledley FD, Stanton VP;
 XX WPI; 1998-521232/44.
 XX
 XX Identifying target genes for allele-specific drugs - used for diagnosis,
 PT prevention and treatment of, e.g. cancers, atherosclerotic plaque,
 PT dysplastic lesions, endometriosis or graft versus host disease.
 XX
 PS Disclosure; Fig 7; 605pp; English.
 XX
 CC This invention describes a novel method for identifying an inhibitor
 CC potentially useful for treatment of cancer, where the inhibitor is active
 CC on a gene vital for cell growth or viability, and where the gene is
 CC subject to loss of heterozygosity (LOH) in a cancer. The inhibitor is
 CC used for preventing the development of cancer in a patient having a
 CC precancerous condition, by administering to the patient a first allele
 CC specific inhibitor (ASI) targeted to an allele of a first essential gene
 CC present in cells of the precancerous condition, where the normal somatic
 CC cells of the patient are heterozygous for the first gene, the inhibitor
 CC is active on at least one but less than all allelic forms of the gene
 CC present in a population and targets only one allelic form present in the
 CC normal somatic cells, and the first gene. The products and methods can be
 CC used in the diagnosis, prevention and treatment of LOH disorders, e.g.
 CC cancers, atherosclerotic plaques, premalignant metaplastic or dysplastic
 CC lesions, benign tumours, endometriosis, polycystic kidney disease, and

CC graft versus host disease. The method can also be used to remove
 CC malignant cells from bone marrow transplants. AAZ25812-226925 represent
 CC human polymorphic sites described in the method of the invention
 XX
 SQ Sequence 21 BP; 3 A; 5 C; 7 G; 6 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.8; DB 1; Length 21;
 Best Local Similarity 88.2%; Pred. NO. 1.1e+03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 570 GGTGCTGTACATGACA 586
 Db 5 GGTGCTGTCCATGACA 21
 RESULT 1113
 AAZ08022/C
 ID AAZ08022 standard; DNA; 21 BP.
 XX
 AC AAZ08022;
 XX
 DT 03-NOV-1999 (first entry)
 XX
 DE DNA 1 encoding isolated peptide fragment-15 of NFAT protein.
 XX
 KW NFAT protein; regulatory domain; calcineurin; transcription factor;
 KW calcineurin substrate; calcineurin-mediated dephosphorylation;
 KW transcription; cytokine gene; immune response; immune-related disease;
 KW allergic disease; atopic disease; autoimmune disease; multiple sclerosis;
 KW rheumatoid arthritis; autoimmune thyroiditis; haemolytic anaemia;
 KW nephrotoxic; neuro-toxic; gene therapy vector; gene therapy; ds.
 XX
 OS Homo sapiens.
 XX
 XX
 FH Key Location/Qualifiers
 FT mat_peptide 1..21
 FT /*tag= a
 FT /product= "Isolated peptide fragment of NFAT protein"
 FT /note= "Isolated from conserved regulatory domain"
 XX
 XX WC9940930-A1.
 XX 19-AUG-1999.
 XX 11-FEB-1999; 99WO-US003085.
 XX 12-FEB-1998; 98US-0074467P.
 XX (BLOO-) CENT BLOOD RES INC.
 XX Hogan PG, Rao A, Aramburu J;
 XX WPI; 1999-508578/42.
 XX P-PSDB; AAY26255.
 XX
 XX Inhibitors of NFAT activation by calcineurin, used to, e.g. treat a
 PT disease involving hyperactivity.
 PT
 XX
 PS Claim 53; Fig 2; 125pp; English.
 CC
 CC The present sequence encodes an isolated peptide fragment of the
 CC conserved regulatory domain of NFAT protein capable of inhibiting protein
 CC -protein interaction between calcineurin and NFAT, or its biologically
 CC active analogue. NFAT belongs to the family of transcription factors and
 CC are direct substrates of calcineurin. These peptide fragments prevent
 CC calcineurin-mediated dephosphorylation of NFAT. This inhibits NFAT-
 CC activation of transcription of cytokine genes required for an immune
 CC response. The peptides are used to treat immune-related diseases like
 CC allergic and atopic diseases, autoimmune diseases such as rheumatoid
 CC arthritis, autoimmune thyroiditis, multiple sclerosis, haemolytic anaemia
 CC etc. The peptides are specific for calcineurin/NFAT interaction, so are
 CC less nephro- and neuro-toxic. The isolated polynucleotides are used for
 CC gene therapy vectors


```
XX
SQ Sequence 21 BP; 8 A; 5 C; 2 G; 6 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1060 TACTTTGATACCTTGG 1076
DB |||||||||||
19 TAATTGAATACTGGG 3

RESULT 1114
AAZ89974
ID AAZ89974 standard; DNA; 21 BP.
XX
AC AAZ89974;
XX
DT 18-OCT-1999 (first entry)
XX
DE Sequence of primer 828-31.
XX
KW Translational repression system; translational repressor; coat protein;
KW constitutive promoter; heterologous gene; bacteriophage MS2; toxic gene;
KW transcriptional control protein; motA; asiA; bacteriophage T4;
KW PCR primer; protease gene; ss.
XX
OS Synthetic.
OS unidentified bacteriophage.
XX
PN WO938985-A2.
XX
PD 05-AUG-1999.
XX
PF 27-JAN-1999; 99WO-US001725.
XX
PR 28-JAN-1998; 98US-0072794P.
PR 26-JAN-1999; 99US-00237712.
XX
PA (AMGE-) AMGEN INC.
XX
PI Brown WC;
XX
DR WPI; 1999-494095/41.
XX
PT A bacteriophage MS2 translational repression system for use in cloning or
PT expressing specific heterologous genes, especially toxic genes.
XX
PS Example; Page 64; 133pp; English.
XX
CC The invention relates to a translational repression system comprising a
CC translational repressor operably linked to a constitutive promoter for
CC use in cloning or expressing a specific heterologous gene. The
CC translational repressor is bacteriophage MS2 coat protein. The improved
CC expression vector systems are capable of expressing exogenous genes,
CC including toxic genes, in Escherichia coli and other host cells. The
CC bacteriophage MS2-based system can be used to stably clone and express
CC certain toxic genes. The MS2-based T4 cassette is useful for the cloning
CC of accessory proteins that are useful in the production of a target
CC protein. The vector systems overcome the problem of promoter leakiness
CC which leads to inappropriate transcription and expression of a gene
CC cloned under the control of the promoter. This can be a problem when
CC cloning toxic genes. The transcriptional control proteins, e.g. motA and
CC asiA of bacteriophage T4, regulate transcription and provide a staged
CC inducible promoter system which is much less complicated and more
CC versatile than prior art non-staged systems. T4 middle promoters direct
CC transcription from specific promoters while inhibiting transcription from
CC E. coli promoters, which therefore minimises competition for
CC translational apparatus and inhibits the cell from responding to target
CC protein production by inducing transcription of protease genes. Sequences
CC AAX89905-998 represent PCR primers used in the course of the invention
XX
SQ Sequence 21 BP; 1 A; 4 C; 6 G; 10 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 373 GATGCCCTGTTTGAGTT 389
DB |||||||||||
2 GATGCCCTTTTGGCTT 18

RESULT 1115
AAZ74353/c
ID AAZ74353 standard; DNA; 21 BP.
XX
AC AAZ74353;
XX
DT 10-SEP-2001 (first entry)
XX
DE Human biallelic marker downstream amplification primer SEQ ID NO:8709.
XX
KW Human genome; biallelic marker; high density disequilibrium map;
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW haplotyping; hybridisation; identification; characterisation;
KW amplification; single nucleotide polymorphism; SNP; PCR primer;
KW diagnosis; ss.
XX
OS Homo sapiens.
XX
PN WO9954500-A2.
XX
PD 28-OCT-1999.
XX
PF 21-APR-1999; 99WO-IB000822.
XX
PR 21-APR-1998; 98US-0082614P.
PR 23-NOV-1998; 98US-0109732P.
XX
PA (GEST ) GENSET.
XX
PI Cohen D, Blumenfeld M, Chumakov I;
XX
DR WPI; 2000-013267/01.
XX
PT Novel biallelic markers used to construct a high density disequilibrium
PT map of the human genome.
XX
PS Claim 8; Page 2087; 2745pp; English.
XX
CC AAZ65654 to AAZ69578 represent human biallelic markers from the present
CC invention, which contain a polymorphic base at position 24 of their
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
CC primers for the biallelic markers. The biallelic markers of the invention
CC have a variety of uses: they can be used for high density mapping of the
CC human genome, and in complex association studies and haplotyping studies
CC which are useful in determining the genetic basis for disease states.
CC Compositions and methods of the invention can also be useful for the
CC identification of the targets for the development of pharmaceutical
CC agents and diagnostic methods, as well as the characterisation of the
CC differential efficacious responses to and side effects from
CC pharmaceutical agents acting on a disease as well as other treatment.
CC N.B. The SEQ ID NOs 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
CC 3367, are not actually given a sequence in the Sequence Listing from the
CC present invention
XX
SQ Sequence 21 BP; 3 A; 4 C; 3 G; 11 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 658 CATAGTATGGAGAGTA 674
DB |||||||||||
18 CATAGAGTGAAGAGTA 2
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RESULT 1116
AAZ74001/C
ID AAZ74001 standard; DNA; 21 BP.
XX
AC AAZ74001;
XX
DT 10-SEP-2001 (first entry)
XX
DE Human biallelic marker downstream amplification primer SEQ ID NO:8357.
XX
KW Human genome; biallelic marker; high density disequilibrium map;
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW haplotyping; hybridisation; identification; characterisation;
KW amplification; single nucleotide polymorphism; SNP; PCR primer;
KW diagnosis; ss.
XX
OS Homo sapiens.
XX
PN WO9954500-A2.
XX
PD 28-OCT-1999.
XX
PF 21-APR-1999; 99WO-IB000822.
XX
PR 21-APR-1998; 98US-0082614P.
XX
PR 23-NOV-1998; 98US-0109732P.
XX
PA (GEST ) GENSET.
XX
PI Cohen D, Blumenfeld M, Chumakov I;
XX
DR WPI; 2000-013267/01.
XX
PT Novel biallelic markers used to construct a high density disequilibrium
PT map of the human genome.
XX
PS Claim 8; Page 2012; 2745pp; English.
XX
CC AAZ65654 to AAZ69578 represent human biallelic markers from the present
CC invention, which contain a polymorphic base at position 24 of their
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
CC primers for the biallelic markers. The biallelic markers of the invention
CC have a variety of uses: they can be used for high density mapping of the
CC human genome, and in complex association studies and haplotyping studies
CC which are useful in determining the genetic basis for disease states.
CC Compositions and methods of the invention can also be useful for the
CC identification of the targets for the development of pharmaceutical
CC agents and diagnostic methods, as well as the characterisation of the
CC differential efficacious responses to and side effects from
CC pharmaceutical agents acting on a disease as well as other treatment.
CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
CC 3367, are not actually given a sequence in the Sequence Listing from the
CC present invention
XX
SQ Sequence 21 BP; 5 A; 8 C; 3 G; 5 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1667 AGCTGTGCTGGGTGAGC 1683
||||| |||||
Db 17 AGCTGTGCAAGGTGAGC 1

RESULT 1117
AAZ74509
ID AAZ74509 standard; DNA; 21 BP.
XX
AC AAZ74509;
XX
DT 10-SEP-2001 (first entry)
XX
DE Human biallelic marker downstream amplification primer SEQ ID NO:8357.
XX
KW Human genome; biallelic marker; high density disequilibrium map;
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW haplotyping; hybridisation; identification; characterisation;
KW amplification; single nucleotide polymorphism; SNP; PCR primer;
KW diagnosis; ss.
XX
OS Homo sapiens.
XX
PN WO9954500-A2.
XX
PD 28-OCT-1999.
XX
PF 21-APR-1999; 99WO-IB000822.
XX
PR 21-APR-1998; 98US-0082614P.
XX
PR 23-NOV-1998; 98US-0109732P.
XX
PA (GEST ) GENSET.
XX
PI Cohen D, Blumenfeld M, Chumakov I;
XX
DR WPI; 2000-013267/01.
XX
PT Novel biallelic markers used to construct a high density disequilibrium
PT map of the human genome.
XX
PS Claim 8; Page 2012; 2745pp; English.
XX
CC AAZ65654 to AAZ69578 represent human biallelic markers from the present
CC invention, which contain a polymorphic base at position 24 of their
CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
CC primers for the biallelic markers. The biallelic markers of the invention
CC have a variety of uses: they can be used for high density mapping of the
CC human genome, and in complex association studies and haplotyping studies
CC which are useful in determining the genetic basis for disease states.
CC Compositions and methods of the invention can also be useful for the
CC identification of the targets for the development of pharmaceutical
CC agents and diagnostic methods, as well as the characterisation of the
CC differential efficacious responses to and side effects from
CC pharmaceutical agents acting on a disease as well as other treatment.
CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
CC 3367, are not actually given a sequence in the Sequence Listing from the
CC present invention
XX
SQ Sequence 21 BP; 5 A; 8 C; 3 G; 5 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1308 CTCTGAGGAGAGCTTCT 1324
||||| |||||
Db 1 CTCTGAGGAGAGCTTCT 17

RESULT 1118
AAZ59687
ID AAZ59687 standard; DNA; 21 BP.
XX
AC AAZ59687;
XX
DT 14-NOV-2000 (first entry)
XX
DE PCR primer used to amplify DNA encoding human CD4 receptor.
XX
KW Target receptor; pathogen; vaccine; viral infection; bacterial infection;
KW parasitic infection; plasmodium; human immune deficiency virus;
KW CD4 receptor; PCR primer; ss.
XX

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OS Homo sapiens.
 PN WO200047216-A1.
 XX 17-AUG-2000.
 PD 15-FEB-2000; 2000WO-FR000375.
 XX 15-FEB-1999; 99FR-00001794.
 PR (IRDR-) IRD INST RECH DEV.
 PA Veas F;
 PI WPI; 2000-532971/48.
 DR Immunogenic composition, useful for making vaccines, especially against
 XX human immune deficiency virus, comprises a complex of a region of the
 PT pathogen and its target receptor.
 PT Disclosure; Page 20; 35pp; French.
 PS The specification describes an immunogenic composition prepared from
 XX preparations obtained forming a complex between an agent that expresses
 CC one or more target receptors of an infectious pathogen and a second agent
 CC that expresses the region of the pathogen that recognizes target
 CC receptor, then treating the complex formed with a fixative. The
 CC immunogenic compositions are used in vaccines for control of viral,
 CC bacterial and parasitic (e.g. Plasmodium) infections, specifically
 CC against the vaccines caused by human immune deficiency virus. Antibodies raised
 CC against the vaccines can be used as immunoassay reagents to detect
 CC pathogens and to inhibit their infectivity. The present PCR primer was
 CC used to amplify DNA encoding human CD4 receptor, for use in the course of
 CC the invention

Sequence 21 BP; 4 A; 5 C; 6 G; 6 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.8; DB 1; Length 21;
 Best Local Similarity 88.2%; Pred. No. 1.1e+03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 943 CCTATGCTGATCTGGG 959
 |||||
 Db 1 CCTAAGCTGATCTGAG 17

RESULT 1119
 AAA59681
 ID AAA59681 standard; DNA; 21 BP.
 XX AAA59681;
 AC 14-NOV-2000 (first entry)
 DT PCR primer used to amplify DNA encoding human CD4 receptor.
 XX Target receptor; pathogen; vaccine; viral infection; bacterial infection;
 XX Parasitic infection; Plasmodium; human immune deficiency virus;
 KW CD4 receptor; PCR primer; ss.
 XX Homo sapiens.
 OS WO200047216-A1.
 PN 17-AUG-2000.
 PD 15-FEB-2000; 2000WO-FR000375.
 XX 15-FEB-1999; 99FR-00001794.
 PR (IRDR-) IRD INST RECH DEV.
 PA Veas F;

XX WPI; 2000-532971/48.
 DR Immunogenic composition, useful for making vaccines, especially against
 XX human immune deficiency virus, comprises a complex of a region of the
 PT pathogen and its target receptor.
 PT Disclosure; Page 20; 35pp; French.
 PS The specification describes an immunogenic composition prepared from
 XX preparations obtained forming a complex between an agent that expresses
 CC one or more target receptors of an infectious pathogen and a second agent
 CC that expresses the region of the pathogen that recognizes target
 CC receptor, then treating the complex formed with a fixative. The
 CC immunogenic compositions are used in vaccines for control of viral,
 CC bacterial and parasitic (e.g. Plasmodium) infections, specifically
 CC against the vaccines caused by human immune deficiency virus. Antibodies raised
 CC against the vaccines can be used as immunoassay reagents to detect
 CC pathogens and to inhibit their infectivity. PCR primers AAA59681-82 were
 CC used to amplify DNA encoding human CD4 receptor, for use in the course of
 CC the invention

Sequence 21 BP; 4 A; 5 C; 6 G; 6 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.8; DB 1; Length 21;
 Best Local Similarity 88.2%; Pred. No. 1.1e+03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 943 CCTATGCTGATCTGGG 959
 |||||
 Db 1 CCTAAGCTGATCTGAG 17

RESULT 1120
 AAC73328/c
 ID AAC73328 standard; DNA; 21 BP.
 XX AAC73328;
 AC 02-FEB-2001 (first entry)
 DT SNP flanking sequence #65 used in multiplexing PCR/SBE assay.
 XX Oligonucleotide array; genotyping; single base extension reaction; SBE;
 KW Polymorphic locus; single nucleotide polymorphism; ss.
 XX Unidentified.
 OS WO200058516-A2.
 PN 05-OCT-2000.
 PD 27-MAR-2000; 2000WO-US008069.
 XX 26-MAR-1999; 99US-0126473P.
 PR 23-JUN-1999; 99US-0140359P.
 XX (WHED) WHITEHEAD INST BIOMEDICAL RES.
 PA (AFFY-) AFFYMETRIX INC.
 XX Fan J, Hirschhorn JN, Huang X, Kaplan P, Lander ES, Lockhart DU;
 PI Ryder T, Sklar P;
 XX WPI; 2000-656171/63.
 DR Universal array of oligonucleotides tags attached to a solid substrate
 XX PT along with locus-specific tagged oligonucleotides useful in genotyping
 PT using single base extension reactions.
 XX Example 7; Page 55; 70pp; English.
 PS The present invention relates to an oligonucleotide array comprising
 CC oligonucleotide tags fixed to a solid substrate. The oligonucleotide

CC array is useful for genotyping a nucleic acid sample at one or more loci
 CC via single base extension (SBE) reactions. A pair of primers is used to
 CC amplify a polymorphic locus in a sample e.g. a single nucleotide
 CC polymorphism (SNP). The present sequence is one such polymorphic locus
 CC used in the present invention. The amplified nucleic acid product is then
 CC used as a template in a SBE reaction with an extension primer. The SBE
 CC reaction products are used to form the oligonucleotide array. Note: This
 CC sequence includes a SNP represented by the degenerate codon in the
 CC sequence
 XX
 SQ Sequence 21 BP; 1 A; 9 C; 4 G; 6 T; 0 U; 1 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 21;
 Best Local Similarity 78.9%; Pred. No. 1.1e+03;
 Matches 15; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

QY 1447 GAGGAGAAACCAAGGAGG 1465
 ||||| ||||| ||||| ||||| |||||
 Db 21 GAGCGGAGAAACCAAGGAGG 3

RESULT 1121
 AAF96969/c
 ID AAF96969 standard; DNA; 21 BP.

XX
 AC AAF96969;

XX
 DT 06-JUN-2001 (first entry)

XX
 DE Human gene single nucleotide polymorphism #1730.

XX
 KW Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
 KW polymorphism; vascular disease; coronary artery disease; forensics;
 KW myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
 KW pulmonary embolism; paternity test; ds.

XX
 OS Homo sapiens.

XX
 PH Key Location/Qualifiers
 FT Variation replace(11,C)
 FT /*tag= a

FT /standard_name= "single nucleotide polymorphism"

XX
 PN WO200118250-A2.

XX
 PD 15-MAR-2001.

XX
 PF 07-SEP-2000; 2000WO-US024503.

XX
 PR 10-SEP-1999; 99US-0153357P.

XX
 PR 26-JUL-2000; 2000US-0220947P.

XX
 PR 16-AUG-2000; 2000US-0225724P.

XX
 PA (WHED) WHITEHEAD INST BIOMEDICAL RES.
 PA (MILL-) MILLENNIUM PHARM INC.

XX
 PI Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, McCarthy JJ;

XX
 DR WPI; 2001-226749/23.

XX
 PT Nucleic acids comprising single nucleotide polymorphisms, useful in
 PT applications such as forensics, paternity testing, medicine, genetic
 PT analysis and phenotype correlations to diseases such as diabetes and
 PT atherosclerosis.

XX
 PS Example; Page 163; 242pp; English.

XX
 CC The present invention provides a method of diagnosing a vascular disease
 CC in an individual, involving determining the sequence at various
 CC polymorphic sites within the human thrombospondin 1 and thrombospondin 4
 CC genes. The sequences at a number of polymorphic sites are also provided
 CC in the specification. In particular, the method can be used in the
 CC diagnosis of atherosclerosis, myocardial infarction, coronary heart

CC disease, stroke, peripheral vascular diseases, venous thromboembolism and
 CC pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
 CC useful in forensics, paternity testing, genetic analysis and phenotype
 CC correlations to diseases. The present sequence is an example of one of
 CC the human gene SNPs shown in the specification

XX
 SQ Sequence 21 BP; 4 A; 6 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 21;
 Best Local Similarity 88.2%; Pred. No. 1.1e+03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1470 GCCAGAGCCCAAGGGG 1486
 ||||| ||||| ||||| ||||| |||||
 Db 20 GCCAGAGCCCAAGGGG 4

RESULT 1122
 AAF95984
 ID AAF95984 standard; DNA; 21 BP.

XX
 AC AAF95984;

XX
 DT 06-JUN-2001 (first entry)

XX
 DE Human gene single nucleotide polymorphism #745.

XX
 KW Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
 KW polymorphism; vascular disease; coronary artery disease; forensics;
 KW myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
 KW pulmonary embolism; paternity test; ds.

XX
 OS Homo sapiens.

XX
 PH Key Location/Qualifiers
 FT Variation replace(11,A)
 FT /*tag= a

FT /standard_name= "single nucleotide polymorphism"

XX
 PN WO200118250-A2.

XX
 PD 15-MAR-2001.

XX
 PF 07-SEP-2000; 2000WO-US024503.

XX
 PR 10-SEP-1999; 99US-0153357P.

XX
 PR 26-JUL-2000; 2000US-0220947P.

XX
 PR 16-AUG-2000; 2000US-0225724P.

XX
 PA (WHED) WHITEHEAD INST BIOMEDICAL RES.
 PA (MILL-) MILLENNIUM PHARM INC.

XX
 PI Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, McCarthy JJ;

XX
 DR WPI; 2001-226749/23.

XX
 PT Nucleic acids comprising single nucleotide polymorphisms, useful in
 PT applications such as forensics, paternity testing, medicine, genetic
 PT analysis and phenotype correlations to diseases such as diabetes and
 PT atherosclerosis.

XX
 PS Example; Page 100; 242pp; English.

XX
 CC The present invention provides a method of diagnosing a vascular disease
 CC in an individual, involving determining the sequence at various
 CC polymorphic sites within the human thrombospondin 1 and thrombospondin 4
 CC genes. The sequences at a number of polymorphic sites are also provided
 CC in the specification. In particular, the method can be used in the
 CC diagnosis of atherosclerosis, myocardial infarction, coronary heart
 CC disease, stroke, peripheral vascular diseases, venous thromboembolism and
 CC pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
 CC useful in forensics, paternity testing, genetic analysis and phenotype
 CC correlations to diseases. The present sequence is an example of one of

CC the human gene SNPS shown in the specification
 XX
 SQ Sequence 21 BP; 2 A; 5 C; 9 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 21;
 Best Local Similarity 88.2%; Pred. No. 1.1e+03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 215 TGGAAATCTATCGCCCT 231
 ||| ||||| |||||
 Db 3 TGGGAATCTGTGCCCT 19

RESULT 1123
 AAH01172/c
 ID AAH01172 standard; DNA; 21 BP.
 XX
 AC AAH01172;
 XX
 DT 24-JUL-2001 (first entry)
 XX
 DE Candida detection nucleotide sequence SEQ ID NO:1163.
 XX
 KW Species specific; genus specific; family specific; probe; detection;
 KW identification; algal; archaeal; bacterial; fungal; parasitological;
 KW microorganism; diagnosis; translation elongation factor Tu; toxin;
 KW translation elongation factor G; RecA recombinase; resistance;
 KW catalytic subunit of proton-translocating ATPase; antimicrobial; vaccine;
 KW primer; ss.
 XX
 OS Candida sp.
 XX
 FN WO200123604-A2.
 XX
 PD 05-APR-2001.
 XX
 PF 28-SEP-2000; 2000WO-CA001150.
 XX
 PR 28-SEP-1999; 99CA-02283458.
 PR 19-MAY-2000; 2000CA-02307010.
 XX
 PA (INFE-) INFECTIO DIAGNOSTIC (IDI) INC.
 XX
 PI Bergeron MG, Boissinot M, Huletsky A, Menard C, Ouellette M;
 PI Picard FJ, Roy PH;
 XX
 DR WPI; 2001-245006/25.
 XX
 PT Nucleic acid sequences are used to generate universal probes and primers
 PT which can be used to identify and detect the presence of algal, archaeal,
 PT bacterial, fungal and parasitological species in a test sample.
 XX
 PS Claim 11; Page 1042; 1580pp; English.

CC The present invention describes a method for generating a repertory of
 CC nucleic acids of tuf, fup, atpD and/or recA genes from which probes
 CC and/or primers are derived. The method comprises amplifying the nucleic
 CC acids of determined algal, archaeal, bacterial, fungal and parasitological
 CC species with a combination of defined primer pairs. The method can be
 CC used for producing probes and/or primers for detecting one or more
 CC related microorganisms e.g. algae, archaea, bacteria, fungi and
 CC parasites, for universal detection and for specific and ubiquitous
 CC detection and identification of an algal, archaeal, bacterial, fungal and
 CC parasitological species, genus, family and group. A nucleic acid (I) obtained
 CC using the method of the invention can be used for the universal detection
 CC of any bacterium, fungus or parasite in a sample and for the detection of
 CC at least one antimicrobial agent resistance gene or at least one toxin
 CC gene. hexA nucleic acids are used for the specific and ubiquitous
 CC detection and for identification of Streptococcus pneumoniae. (I) can be
 CC used to design a therapeutic agent which is effective against
 CC microorganisms. Microbial species or genus or family or phylum or group
 CC which can be detected include Abiotrophia adiacens, Bordetella sp.,
 CC Corynebacterium sp., Enterobacteriaceae group, Escherichia coli,

CC Mycobacteriaceae family, Pseudomonads group, Streptococcus sp., Neisseria
 CC gonorrhoeae and Staphylococcus sp. . Using DNA based tests provides faster
 CC results than substrate specificity tests as results can be determined in
 CC an hour and improved accuracy is also achieved. AAH0010 to AAH002304
 CC represent nucleotide sequences and primers/probes which are given in the
 CC exemplification of the present invention
 XX
 SQ Sequence 21 BP; 6 A; 3 C; 5 G; 7 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 21;
 Best Local Similarity 88.2%; Pred. No. 1.1e+03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1718 GTTCTTAACCTTGAACC 1734
 ||||| ||||| |||||
 Db 21 GTTCTTAACCTTGAAC 5

RESULT 1124
 AAD13837
 ID AAD13837 standard; DNA; 21 BP.
 XX
 AC AAD13837;
 XX
 DT 06-NOV-2001 (first entry)
 XX
 DE Integrase gene sequencing primer, IN-PCR.
 XX
 KW Recombination assay; HIV; Human immunodeficiency virus; integrase;
 KW phenotypic resistance; genotypic resistance; molecular target study;
 KW chemotherapy; primer; ss.
 XX
 OS Unidentified.
 XX
 FN WO200157245-A2.
 XX
 PD 09-AUG-2001.
 XX
 PF 05-FEB-2001; 2001WO-BE000017.
 XX
 PR 04-FEB-2000; 2000GB-00002533.
 PR 15-JAN-2001; 2001GB-00001011.
 XX
 PA (LEUV-) LEUVEN RES & DEV.
 XX
 PI Witvrouw M, Fikkert V, Pannecouque C, Cherepanov P, Van Laethem K;
 PI De Clercq E, Vandamme A, Debyser Z;
 XX
 DR WPI; 2001-496927/54.
 XX
 PT Determining susceptibility of HIV isolate to anti-HIV compounds, by
 PT excising sequence encoding viral glycoprotein, processing, co-
 PT transfecting and culturing cell with obtained isolates, harvesting
 PT chimeric stock.
 XX
 PS Claim 40; Page 43; 59pp; English.

CC The invention relates to recombination assay for the HIV (Human
 CC immunodeficiency virus) envelope genes, gp120, gp41 and gp160. The
 CC invention further relates to env-deleted proviral clones, the
 CC optimisation of the PCR amplification of the corresponding env-genes and
 CC the subsequent sequencing of these genes. These techniques have been
 CC applied on several HIV-1 (NL4.3) strains selected in vitro in the presence
 CC of increasing concentrations of inhibitors of HIV entry and evaluated for
 CC the phenotypic resistance of these recombinant viruses. This phenotypic
 CC resistance has been correlated with genotypic resistance. The invention
 CC also involves a recombination assay for the integrase gene. Determining
 CC susceptibility of HIV is useful to study molecular target and resistance
 CC profile of action of compounds with anti-HIV activity and to adapt
 CC chemotherapy administered to an HIV patient. A genetic information data
 CC set on anti-HIV resistance is useful to influence anti-HIV therapy. The
 CC present sequence is a primer used to sequence integrase gene

SQ Sequence 21 BP; 10 A; 1 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 247 GAGGAGATGACCAAGTA 263
||||| ||||| |||||
Db 2 GAGGAATGACCAAGTA 18

RESULT 1125

ABK97562
ID ABK97562 standard; DNA; 21 BP.

XX AC ABK97562;

XX DT 07-OCT-2002 (first entry)

XX DE Human LCAT gene forward PCR primer #15.

XX KW Lecithin-cholesterol acyltransferase; LCAT; Norum disease; gene therapy;
XX KW fish-eye disease; atherosclerotic cardiovascular disease; forensic;
XX KW population diversity; anthropological lineage; paternity testing; human;
XX KW polymorphism; PCR; primer; ss.

XX OS Homo sapiens.

XX PN W0200253575-A1.

XX PD 11-JUL-2002.

XX PF 03-JAN-2001; 2001WO-US000092.

XX PR 03-JAN-2001; 2001WO-US000092.

XX PA (GENA-) GENAISSANCE PHARM INC.

XX PI Chew A, Denton RR, Nandabalan K, Stephens JC;

XX WPI; 2002-557737/59.

XX PT Novel isolated polymorphic variant polynucleotide of lecithin-cholesterol
XX PT acyltransferase gene, useful for studying expression and biological
XX PT function of the gene, and for therapeutic, diagnostic or forensic
XX PT purposes.

XX PS Example 1; Page 29; 72pp; English.

XX CC The present invention relates to a new polynucleotide comprising a
XX CC nucleotide sequence which is a polymorphic variant of a reference
XX CC sequence for lecithin-cholesterol acyltransferase (LCAT). The invention
XX CC is useful for identifying an association between a trait (preferably a
XX CC clinical response to drug targeting LCAT) and at least one genotype or
XX CC haplotype of LCAT gene. The method of the invention has applicability in
XX CC developing diagnostic tests and therapeutic treatments for Norum disease,
XX CC fish-eye disease and atherosclerotic cardiovascular disease. The
XX CC haplotyping and genotyping methods are useful for studying population
XX CC diversity, anthropological lineage, the significance of diversity and
XX CC lineage at the phenotypic level, paternity testing, forensic applications
XX CC and for identifying association between the LCAT genetic variation and a
XX CC trait such as level of drug response or susceptibility to disease. In
XX CC addition, the methods for identifying the LCAT haplotypes present in
XX CC individuals are useful in the development of drugs targeting LCAT. For
XX CC example, determining the frequency of individual LCAT haplotypes in a
XX CC population with a specific disease, e.g. Norum disease, will facilitate
XX CC the development of drugs targeting the LCAT isoform(s) that are most
XX CC frequent in that disease population. The present nucleic acid sequence
XX CC represents one of a collection (ABK97534-ABK97573) of PCR primers that
XX CC were used in the methods of the invention to detect polymorphisms in the
XX CC human LCAT gene

XX SQ Sequence 21 BP; 6 A; 7 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 615 AGAGGCTTCTTACACCA 631
||||| ||||| |||||
Db 3 AGAGGACTTCTTACCA 19

RESULT 1126

AAS16984/c
ID AAS16984 standard; DNA; 21 BP.

XX AC AAS16984;

XX DT 26-MAR-2002 (first entry)

XX DE Human VCI cDNA PCR primer.

XX KW Human; KV protein; KVE702; angiogenic factor antagonist; angiogenesis;
XX KW vascular endothelial structure regulator; cancer; vascular endothelium;
XX KW tumour; blood vessel; epithelial cell; cytostatic; gene therapy; ss;
XX KW PCR primer; VCI.

XX OS Homo sapiens.

XX OS Synthetic.

XX PN W0200183562-A2.

XX PD 08-NOV-2001.

XX PF 04-MAY-2001; 2001WO-GB001956.

XX PR 04-MAY-2000; 2000GB-00010630.

XX PA (UYWA-) UNIV WALES COLLEGE OF MEDICINE.

XX PI Jiang WG;

XX WPI; 2002-066521/09.

XX PT Novel nucleic acid for inhibition of angiogenesis and prophylaxis or
XX PT treatment of cancer, comprises both an angiogenic factor antagonist and a
XX PT vascular endothelial structure regulator.

XX PS Example 1; Page 17; 66pp; English.

XX CC The invention relates to recombinant nucleic acid sequences that encode
XX CC both an angiogenic factor antagonist and a vascular endothelial structure
XX CC regulator, collectively referred to as a KV protein. KV DNA and proteins,
XX CC and also cells and compositions containing the sequences, are useful in
XX CC treating or preventing cancer or angiogenesis in mammals, in particular
XX CC humans. KV proteins are also useful for regulation of the development of
XX CC blood vessels and their formation, in the vascular endothelium and/or
XX CC tumour. The KVE702 gene and its fragments are useful in transfection of
XX CC human epithelial cells and to generate products suitable for angiogenesis
XX CC intervention. This sequence represents a PCR primer used in cloning of
XX CC cDNA encoding the human VCI protein used in methods of the invention

XX SQ Sequence 21 BP; 4 A; 6 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 131 ATTATGGACAAGGCCAC 147
||||| ||||| |||||
Db 17 ATTGTGGACAAGGCAC 1

RESULT 1127

AAD31930

```

ID AAD31930 standard; DNA; 21 BP.
AC AAD31930;
XX
DT 18-JUN-2002 (first entry)
XX
DE Plasmodium falciparum integral membrane protein 2B gene fragment.
XX
DE Microbial virulence factor; genetic predisposition; Alzheimer's disease;
XX Parkinson's disease; schizophrenia; frontotemporal lobe dementia;
XX hereditary multi-infarct dementia; primary X-linked mental retardation;
XX dementia; myopathy; familial British dementia; psychiatric disorder;
XX transgenic animal; integral membrane protein 2B gene; ds.
XX
OS Plasmodium falciparum.
XX
XX WO200214546-A1.
XX
XX 21-FEB-2002.
XX
XX 15-FEB-2001; 2001WO-IB000189.
XX
XX 16-AUG-2000; 2000WO-IB001127.
XX
XX (FRIT/) FRITZSCHE M.
XX
XX Fritzsche M;
XX
XX WPI; 2002-241910/29.
XX
XX
XX Use of DNA sequence having fragment of nucleic acid encoding putative
XX microbial virulence factor useful for identification of disease e.g.
XX Alzheimer's disease, caused by mutations or for genetic predisposition.
XX
XX Example 1; Page 22; 52pp; English.
XX
XX The present invention relates to the use of a DNA sequence comprising a
XX fragment of a nucleic acid encoding a putative microbial virulence factor
XX for the identification of a disease caused by mutations or for a genetic
XX predisposition. The invention also relates to a method for identification
XX of a disease which comprises detecting the presence of a mutation within
XX a nucleic acid sequence of the fragment of virulence factor in a tissue-
XX or blood sample of a subject, where the tissue sample is a foetal graft
XX for neurotransplantation and where the sequence is inserted in the 3' UTR
XX (untranslated region) of the gene and mutation is found in the
XX polyadenylation signal of GI. The method is useful for identification of
XX a disease caused by mutation or for their genetic predisposition where
XX the disease is human disease which is from Alzheimer's disease,
XX Parkinson's disease, schizophrenia, myopathy, other forms of dementias
XX (frontotemporal lobe dementia, autosomal dominant Parkinson Lewy-Body
XX dementia, hereditary multi-infarct dementia, familial British dementia,
XX primary X-linked mental retardation) and where the human disease
XX constitutes a predisposition or a genetic variation, the pathological
XX manifestation of which is triggered by medications or drugs which is
XX preferably cannabis, where the manifestation comprises any forms of
XX dementia, schizophrenia or related psychiatric disorders. The invention
XX also relates to transgenic animals (e.g. comprising a non-functional
XX endogenous cannabinoid receptor (CB1) gene) which are useful for the
XX identifying or screening of compounds that have an effect on the
XX activity, expression or regulation of the translated protein (e.g. CB1
XX protein). The present sequence is Plasmodium falciparum integral membrane
XX protein 2B gene fragment. This sequence is used in the exemplification of
XX the invention
XX
SQ Sequence 21 BP; 9 A; 0 C; 0 G; 12 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1613 TTTATTAAATAAATAAATA 1629
Db 5 TTTTAAATAAATAAATA 21

RESULT 1128
ABX09576/C
ID ABX09576 standard; DNA; 21 BP.
XX
AC ABX09576;
XX
DT 22-JAN-2003 (first entry)
XX
DE Arteriosclerosis-detecting probe from NFL #23.
XX
XX Arteriosclerosis; diagnosis; hybridisation; synergism; gene therapy;
XX mutation; probe; ss.
XX
XX Homo sapiens.
XX
XX WO200272882-A2.
XX
XX 19-SEP-2002.
XX
XX 13-MAR-2002; 2002WO-EP002780.
XX
XX 13-MAR-2001; 2001DE-01011925.
XX
XX (OGHA-) OGHAM GMBH.
XX
XX Cullen P, Seedorf U;
XX
XX WPI; 2002-723374/78.
XX
XX Determining genetic risk of arteriosclerosis, for clinical diagnosis,
XX comprises hybridizing patient nucleic acid with an array of probes
XX derived from risk-associated reference genes and their mutations.
XX
XX Example 1; Page 130; 146pp; German.
XX
XX This invention describes a novel method for determining the genetic risk
XX of arteriosclerosis both for clinical diagnosis and for population
XX studies. The method comprises: (i) selecting risk-associated reference
XX nucleic acid sequences, including their functionally characterizing
XX mutations; (ii) applying probes from these sequences, or their
XX complements, to a carrier; (iii) hybridising the probes with a nucleic
XX acid from (or synthesised from) a patient sample; and (iv) detecting and
XX evaluating the hybridisation pattern. The method provides a quick,
XX inexpensive and informative diagnosis, and makes possible a
XX multifactorial analysis for detecting e.g. synergism between different
XX mutations or mutations that when present alone carry no risk but are risk
XX -associated in presence of other mutations. The results may be combined
XX with known risk-assessment methods to provide a more reliable diagnosis,
XX especially important with new therapeutic methods (e.g. gene therapy)
XX that are directed against specific genes. All relevant mutations in a
XX reference sequence can be screened for in a single test and the method is
XX well suited to automation. ABX09147-ABX09676 represent probes used to
XX illustrate the method of the invention
XX
SQ Sequence 21 BP; 2 A; 5 C; 6 G; 8 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1113 GACTAACCCAGAACGCA 1129
Db 19 GAGTAACCCAGAACTCGA 3

RESULT 1129
ABS97329/C
ID ABS97329 standard; DNA; 21 BP.
XX
AC ABS97329;
XX

```

23-DEC-2002 (first entry)

Aryl hydrocarbon nuclear translocation receptor polymorphic sequence #8.

Human, ss; primer; cytochrome P450 A1; CYP4501A1; UGT2B4; MDR1; PCR; cytochrome P450 A2; CYP4501A2; cytochrome P450 02E; CYP45002E1; LTF; adrenergic receptor beta1; ADRB1; aryl hydrocarbon; AHR; MRP3; NR1I2; aryl hydrocarbon receptor nuclear translocator; ARNT; cathepsin S; CTSS; cyclooxygenase 2; COX2; diazepam binding inhibitor; DBI; haematological; epoxide hydroxylase 2; EPHX2; 5-lipoxygenase activating protein; FLAP; glutathione-S-transferase 12; GST12; histamine-N-methyl transferase; HNMT; kallikrein 2; KLK2; nicotinamide-N-methyl transferase; NNMT; NADPH quinone oxidoreductase 2; NQO2; sulfotransferase thermolabile; STM; UDP-glucuronosyl transferase 2B4; UDP-glucuronosyl transferase 2B7; UGT2B7; UDP-glucuronosyl transferase; UGT2B15; urokinase receptor; uPA; multidrug resistance 1; lactotransferrin; orphan nuclear receptor; multidrug resistance associated protein 3; cancer; prostate; acetylcholine muscarinic receptor; CHMR1; CHMR2; CHMR3; CHMR4; CHMR5; altered drug metabolism; cardiovascular function; colorectal tumour; central nervous system; pulmonary; immunological.

Homo sapiens.

WO200257410-A2.

25-JUL-2002.

28-NOV-2001; 2001WO-US044838.

28-NOV-2000; 2000US-00724389.

(DNAS-) DNA SCI LAB INC.

Guida M, Hall J;

WPI; 2002-698522/75.

Isolated nucleic acid molecules having polymorphisms in known human genes e.g. cytochrome P450 and cathepsin S useful as genetic linkage markers for locating, identifying and characterizing the genes responsible for disorder-related traits.

Example 6; Page 109; 714pp; English.

This invention relates to the sequence of an isolated nucleic acid molecule comprising at least one base variation from that of a known human cytochrome P450 A1 (CYP4501A1), cytochrome P450 A2 (CYP4501A2), cytochrome P450 02E1 (CYP45002E1), adrenergic receptor beta1 (ADRB1), aryl hydrocarbon (AHR), aryl hydrocarbon receptor nuclear translocator (ARNT), cathepsin S (CTSS), cyclooxygenase 2 (COX2), diazepam binding inhibitor (DBI), epoxide hydroxylase 2 (EPHX2), 5-lipoxygenase activating protein (FLAP), glutathione-S-transferase 12 (GST12), histamine-N-methyl transferase (HNMT), kallikrein 2 (KLK2), nicotinamide-N-methyl transferase (NNMT), NADPH quinone oxidoreductase 2 (NQO2), sulfotransferase thermolabile (STM), UDP-glucuronosyl transferase 2B7 (UGT2B7), UDP-glucuronosyl transferase 2B4 (UGT2B4), UDP-glucuronosyl transferase 2B7 (UGT2B7), urokinase receptor (uPA), multidrug resistance 1 (MDR1), lactotransferrin (LTF), multidrug resistance associated protein 3 (MRP3), orphan nuclear receptor (NR1I2), or acetylcholine muscarinic receptor 1, 2, 3, 4, or 5 (CHMR1, CHMR2, CHMR3, CHMR4 or CHMR5) sequence. The polymorphisms in the human genes cited in the invention are useful as genetic linkage markers for locating and characterizing the genes that are responsible for specific traits within the genome and eventually identifying the genes responsible for a variety of disorder-related traits as a result of their e.g. overexpression, constitutive expression, mutation or underexpression, which may be used in diagnosing and/or treating the disorders. The nucleic acid molecules comprising the polymorphic sequences contained in CYP4501A1, CYP4501A2, CYP45002E1, ARNT, EPHX2, GST12, NNMT, NQO2, NR1I2, STM, UGT2B4, UGT2B7, UGT2B15, AHR, MDR1 and/or MDR3 are useful for screening individuals for altered drug metabolism. The polymorphic sequences contained in CYP4501A1, CYP4501A2, AHR, MDR1 and/or MDR3 may also be used to screen individuals for susceptibility to cancer. Polymorphic sequences in ADRB1 or CHMR2 are

used to screen for altered cardiovascular function, in COX2 for altered susceptibility to colorectal tumours, in DBI or CHMR1 for altered central nervous system function, in FLAP and HNMT for altered pulmonary, immunological or haematological function, in LTF for altered immunological or protease activity in the prostate, in LTF for altered immunological or haematological function, in CHMR3, CHMR4 or CHMR5 for altered central and peripheral nervous system function. The present sequence represents a PCR primer used to amplify the sequences of the invention

Sequence 21 BP; 9 A; 2 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 21;

Best Local Similarity 88.2%; Pred. No. 1.1e+03;

Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

1579 ATATTTTCATTATTTCTCT 1595

||||| |||||||

17 ATATTTCTATTTCACCT 1

RESULT 1130

ABS98125/c

ID ABS98125 standard; DNA; 21 BP.

XX AC ABS98125;

XX DT 23-DEC-2002 (first entry)

XX DE Human multidrug resistance gene polymorphic sequence #27.

XX KW Human; ds; cytochrome P450 A1; CYP4501A1; UGT2B4; MDR1; cytochrome P450 A2; CYP4501A2; cytochrome P450 02E; CYP45002E1; LTF; adrenergic receptor beta1; ADRB1; aryl hydrocarbon; AHR; MRP3; NR1I2; aryl hydrocarbon receptor nuclear translocator; ARNT; cathepsin S; CTSS; cyclooxygenase 2; COX2; diazepam binding inhibitor; DBI; haematological; epoxide hydroxylase 2; EPHX2; 5-lipoxygenase activating protein; FLAP; glutathione-S-transferase 12; GST12; histamine-N-methyl transferase; HNMT; kallikrein 2; KLK2; nicotinamide-N-methyl transferase; NNMT; NADPH quinone oxidoreductase 2; NQO2; sulfotransferase thermolabile; STM; UDP-glucuronosyl transferase 2B4; UDP-glucuronosyl transferase 2B7; UGT2B7; UDP-glucuronosyl transferase; UGT2B15; urokinase receptor; uPA; multidrug resistance 1; lactotransferrin; orphan nuclear receptor; multidrug resistance associated protein 3; cancer; prostate; acetylcholine muscarinic receptor; CHMR1; CHMR2; CHMR3; CHMR4; CHMR5; altered drug metabolism; cardiovascular function; colorectal tumour; central nervous system; pulmonary; immunological; SNP; single nucleotide polymorphism.

Homo sapiens.

WO200257410-A2.

25-JUL-2002.

28-NOV-2001; 2001WO-US044838.

28-NOV-2000; 2000US-00724389.

(DNAS-) DNA SCI LAB INC.

Guida M, Hall J;

WPI; 2002-698522/75.

Isolated nucleic acid molecules having polymorphisms in known human genes e.g. cytochrome P450 and cathepsin S useful as genetic linkage markers for locating, identifying and characterizing the genes responsible for disorder-related traits.

Example 6; Page 109; 714pp; English.

This invention relates to the sequence of an isolated nucleic acid molecule comprising at least one base variation from that of a known human cytochrome P450 A1 (CYP4501A1), cytochrome P450 A2 (CYP4501A2), cytochrome P450 02E1 (CYP45002E1), adrenergic receptor beta1 (ADRB1), aryl hydrocarbon (AHR), aryl hydrocarbon receptor nuclear translocator (ARNT), cathepsin S (CTSS), cyclooxygenase 2 (COX2), diazepam binding inhibitor (DBI), epoxide hydroxylase 2 (EPHX2), 5-lipoxygenase activating protein (FLAP), glutathione-S-transferase 12 (GST12), histamine-N-methyl transferase (HNMT), kallikrein 2 (KLK2), nicotinamide-N-methyl transferase (NNMT), NADPH quinone oxidoreductase 2 (NQO2), sulfotransferase thermolabile (STM), UDP-glucuronosyl transferase 2B4 (UGT2B4), UDP-glucuronosyl transferase 2B7 (UGT2B7), UDP-glucuronosyl transferase 2B4 (UGT2B4), UDP-glucuronosyl transferase 2B7 (UGT2B7), urokinase receptor (uPA), multidrug resistance 1 (MDR1), lactotransferrin (LTF), multidrug resistance associated protein 3 (MRP3), orphan nuclear receptor (NR1I2), or acetylcholine muscarinic receptor 1, 2, 3, 4, or 5 (CHMR1, CHMR2, CHMR3, CHMR4 or CHMR5) sequence. The polymorphisms in the human genes cited in the invention are useful as genetic linkage markers for locating and characterizing the genes that are responsible for specific traits within the genome and eventually identifying the genes responsible for a variety of disorder-related traits as a result of their e.g. overexpression, constitutive expression, mutation or underexpression, which may be used in diagnosing and/or treating the disorders. The nucleic acid molecules comprising the polymorphic sequences contained in CYP4501A1, CYP4501A2, CYP45002E1, ARNT, EPHX2, GST12, NNMT, NQO2, NR1I2, STM, UGT2B4, UGT2B7, UGT2B15, AHR, MDR1 and/or MDR3 are useful for screening individuals for altered drug metabolism. The polymorphic sequences contained in CYP4501A1, CYP4501A2, AHR, MDR1 and/or MDR3 may also be used to screen individuals for susceptibility to cancer. Polymorphic sequences in ADRB1 or CHMR2 are

human cytochrome P450 A1 (CYP450A1), cytochrome P450 A2 (CYP450A2),
 cytochrome P450 02E1 (CYP45002E1), adrenergic receptor beta1 (ADBR1),
 aryl hydrocarbon (AHR), aryl hydrocarbon receptor nuclear translocator
 (ARNT), cathepsin S (CTSS), cyclooxygenase 2 (COX2), diazepam binding
 inhibitor (DBI), epoxide hydroxylase 2 (EPHX2), 5-lipoxygenase activating
 protein (FLAP), glutathione-S-transferase 12 (GST12), histamine-N-methyl
 transferase (HNMT), kallikrein 2 KLK2, nicotinamide-N-methyl
 transferase (NNMT), NADPH quinone oxidoreductase 2 (NQO2),
 sulfoltransferase thermolabile (STM), UDP-glucuronosyl transferase 2B4
 (UGT2B4), UDP-glucuronosyl transferase 2B7 (UGT2B7), UDP-glucuronosyl
 transferase (UGT2B15), urokinase receptor (uPA), multidrug resistance 1
 (MDR1), lactotransferrin (LTF), multidrug resistance associated protein 3
 (MRP3), orphan nuclear receptor (NRI12), or acetylcholine muscarinic
 receptor 1, 2, 3, 4, or 5 (CHMR1, CHMR2, CHMR3, CHMR4 or CHMR5) sequence.
 The polymorphisms in the human genes cited in the invention are useful as
 genetic linkage markers for locating and characterising the genes that
 are responsible for specific traits within the genome and eventually
 identifying the genes responsible for a variety of disorder-related
 traits as a result of their e.g., overexpression, constitutive
 expression, mutation or underexpression, which may be used in diagnosing
 and/or treating the disorders. The nucleic acid molecules comprising the
 polymorphic sequences contained in CYP450A1, CYP450A2, CYP4502E1,
 ARNT, EPHX2, GST12, NNMT, NQO2, NRI12, STM, UGT2B4, UGT2B7, UGT2B15, AHR,
 MDR1 and/or MDR3 are useful for screening individuals for altered drug
 metabolism. The polymorphic sequences contained in CYP450A1, CYP450A2,
 AHR, MDR1 and/or MDR3 may also be used to screen individuals for
 susceptibility to cancer. Polymorphic sequences in ADRB1 or CHMR2 are
 used to screen for altered cardiovascular function, in COX2 for altered
 susceptibility to colorectal tumours, in DBI or CHMR1 for altered central
 nervous system function, in FLAP and HNMT for altered pulmonary,
 immunological or haematological function, in KLK2 for altered serine
 protease activity in the prostate, in LTF for altered immunological or
 haematological function, in CHMR3, CHMR4 or CHMR5 for altered central and
 peripheral nervous system function. The present sequence represents a
 polymorphic DNA sequence of the invention

Sequence 21 BP; 8 A; 2 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 21;
 Best Local Similarity 88.2%; Pred. No. 1.1e+03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1051 TACAATGACTACTTTGA 1067
 ||||| ||||| |||||
 17 TACATAACTACTTTTA 1

RESULT 1131
 ABS98293/c
 ID ABS98293 standard; DNA; 21 BP.
 XX ABS98293;
 AC ABS98293;
 XX
 DT 23-DEC-2002 (first entry)
 XX
 DE Human lactoferrin (LTF) gene polymorphic sequence #56.
 XX
 XX Human; ds; cytochrome P450 A1; CYP450A1; UGT2B4; MDR1;
 KW cytochrome P450 A2; CYP450A2; cytochrome P450 02E; CYP45002E1; LTF;
 KW adrenergic receptor beta1; ADRB1; aryl hydrocarbon; AHR; MRP3; NRI12;
 KW aryl hydrocarbon receptor nuclear translocator; ARNT; cathepsin S; CTSS;
 KW cyclooxygenase 2; COX2; diazepam binding inhibitor; DBI; haematological;
 KW epoxide hydroxylase 2; EPHX2; 5-lipoxygenase activating protein; FLAP;
 KW glutathione-S-transferase 12; GST12; histamine-N-methyl transferase;
 KW HNMT; kallikrein 2; KLK2; nicotinamide-N-methyl transferase; NNMT;
 KW NADPH quinone oxidoreductase 2; NQO2; sulfoltransferase thermolabile; STM;
 KW UDP-glucuronosyl transferase 2B4; UDP-glucuronosyl transferase 2B7;
 KW UGT2B7; UDP-glucuronosyl transferase; UGT2B15; urokinase receptor; uPA;
 KW multidrug resistance 1; lactotransferrin; orphan nuclear receptor;
 KW multidrug resistance associated protein 3; cancer; prostate;
 KW acetylcholine muscarinic receptor; CHMR1; CHMR2; CHMR3; CHMR4;
 KW altered drug metabolism; cardiovascular function; colorectal tumour;
 KW central nervous system; pulmonary; immunological; SNP;

single nucleotide polymorphism.
 XX Homo sapiens.
 OS WO200257410-A2.
 PN 25-JUL-2002.
 PD
 XX
 XX 28-NOV-2001; 2001WO-US044838.
 PF
 XX 28-NOV-2000; 2000US-00724389.
 PR
 XX (DNAS-) DNA SCI LAB INC.
 PA
 XX Guida M, Hall J;
 PI
 XX WPI; 2002-698522/75.
 DR
 XX Isolated nucleic acid molecules having polymorphisms in known human genes
 PT e.g. cytochrome P450 and cathepsin S useful as genetic linkage markers
 PT for locating, identifying and characterizing the genes responsible for
 PT disorder-related traits.
 XX
 PS Example 23; Page 149; 714pp; English.
 XX
 CC This invention relates to the sequence of an isolated nucleic acid
 CC molecule comprising at least one base variation from that of a known
 CC human cytochrome P450 A1 (CYP450A1), cytochrome P450 A2 (CYP450A2),
 CC cytochrome P450 02E1 (CYP45002E1), adrenergic receptor beta1 (ADBR1),
 CC aryl hydrocarbon (AHR), aryl hydrocarbon receptor nuclear translocator
 CC (ARNT), cathepsin S (CTSS), cyclooxygenase 2 (COX2), diazepam binding
 CC inhibitor (DBI), epoxide hydroxylase 2 (EPHX2), 5-lipoxygenase activating
 CC protein (FLAP), glutathione-S-transferase 12 (GST12), histamine-N-methyl
 CC transferase (HNMT), kallikrein 2 KLK2, nicotinamide-N-methyl
 CC transferase thermolabile (STM), UDP-glucuronosyl transferase 2B4
 CC (UGT2B4), UDP-glucuronosyl transferase 2B7 (UGT2B7), UDP-glucuronosyl
 CC transferase (UGT2B15), urokinase receptor (uPA), multidrug resistance 1
 CC (MDR1), lactotransferrin (LTF), multidrug resistance associated protein 3
 CC (MRP3), orphan nuclear receptor (NRI12), or acetylcholine muscarinic
 CC receptor 1, 2, 3, 4, or 5 (CHMR1, CHMR2, CHMR3, CHMR4 or CHMR5) sequence.
 CC The polymorphisms in the human genes cited in the invention are useful as
 CC genetic linkage markers for locating and characterising the genes that
 CC are responsible for specific traits within the genome and eventually
 CC identifying the genes responsible for a variety of disorder-related
 CC traits as a result of their e.g., overexpression, constitutive
 CC expression, mutation or underexpression, which may be used in diagnosing
 CC and/or treating the disorders. The nucleic acid molecules comprising the
 CC polymorphic sequences contained in CYP450A1, CYP450A2, CYP4502E1,
 CC ARNT, EPHX2, GST12, NNMT, NQO2, NRI12, STM, UGT2B4, UGT2B7, UGT2B15, AHR,
 CC MDR1 and/or MDR3 are useful for screening individuals for altered drug
 CC metabolism. The polymorphic sequences contained in CYP450A1, CYP450A2,
 CC AHR, MDR1 and/or MDR3 may also be used to screen individuals for
 CC susceptibility to cancer. Polymorphic sequences in ADRB1 or CHMR2 are
 CC used to screen for altered cardiovascular function, in COX2 for altered
 CC susceptibility to colorectal tumours, in DBI or CHMR1 for altered central
 CC nervous system function, in FLAP and HNMT for altered pulmonary,
 CC immunological or haematological function, in KLK2 for altered serine
 CC protease activity in the prostate, in LTF for altered immunological or
 CC haematological function, in CHMR3, CHMR4 or CHMR5 for altered central and
 CC peripheral nervous system function. The present sequence represents a
 CC polymorphic DNA sequence of the invention

Sequence 21 BP; 8 A; 3 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 21;
 Best Local Similarity 88.2%; Pred. No. 1.1e+03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1586 CTATTCTCTGTGTATT 1602
 ||||| ||||| |||||
 17 CTATTCTCTGTGAATT 1

RESULT 1132
 ABS97328/c
 ID ABS97328 standard; DNA; 21 BP.
 XX AC ABS97328;
 XX DT 23-DEC-2002 (first entry)
 XX DE Aryl hydrocarbon nuclear translocation receptor polymorphic sequence #7.
 XX Human; ss; primer; cytochrome P450 A1; CYP4501A1; UGT2B4; MDR1; PCR;
 KW cytochrome P450 A2; CYP4501A2; cytochrome P450 02E; CYP45002E1; LTF;
 KW adrenergic receptor beta1; ADRB1; aryl hydrocarbon; AHR; MRP3; NR1I2;
 KW aryl hydrocarbon receptor nuclear translocator; ARNT; cathepsin S; CTSS;
 KW cyclooxygenase 2; COX2; diazepam binding inhibitor; DBI; haematological;
 KW epoxide hydroxylase 2; EPHX2; 5-lipoxygenase activating protein; FLAP;
 KW glutathione-S-transferase 12; GST12; histamine-N-methyl transferase; NNMT;
 KW NNMT; kallikrein 2; KLK2; nicotinamide-N-methyl transferase; NNMT;
 KW NADPH quinone oxidoreductase 2; NQO2; sulfoltransferase thermolabile; STM;
 KW UDP-glucuronosyl transferase 2B4; UDP-glucuronosyl transferase 2B7;
 KW UGT2B7; UDP-glucuronosyl transferase; UGT2B15; uronkinase receptor; uPA;
 KW multidrug resistance 1; lactotransferrin; orphan nuclear receptor;
 KW multidrug resistance associated protein 3; cancer; prostate;
 KW acetylcholine muscarinic receptor; CHMR1; CHMR2; CHMR3; CHMR4; CHMR5;
 KW altered drug metabolism; cardiovascular function; colorectal tumour;
 KW central nervous system; pulmonary; immunological.
 XX OS Homo sapiens.
 XX PN WO200257410-A2.
 XX PD 25-JUL-2002.
 XX PF 28-NOV-2001; 2001WO-US044838.
 XX PR 28-NOV-2000; 2000US-00724389.
 XX PA (DNAS-) DNA SCI LAB INC.
 XX PI Guida M, Hall J;
 XX WPI; 2002-698522/75.
 XX Isolated nucleic acid molecules having polymorphisms in known human genes
 PT e.g. cytochrome p450 and cathepsin S useful as genetic linkage markers
 PT for locating, identifying and characterizing the genes responsible for
 PT disorder-related traits.
 XX Example 6; Page 109; 714pp; English.
 XX This invention relates to the sequence of an isolated nucleic acid
 CC molecule comprising at least one base variation from that of a known
 CC human cytochrome P450 A1 (CYP4501A1), cytochrome P450 A2 (CYP4501A2),
 CC cytochrome P450 02E1 (CYP45002E1), adrenergic receptor beta1 (ADRB1),
 CC aryl hydrocarbon (AHR), aryl hydrocarbon receptor nuclear translocator
 CC (ARNT), cathepsin S (CTSS), cyclooxygenase 2 (COX2), diazepam binding
 CC inhibitor (DBI), epoxide hydroxylase 2 (EPHX2), 5-lipoxygenase activating
 CC protein (FLAP), glutathione-S-transferase 12 (GST12), histamine-N-methyl
 CC transferase (NNMT), (kallikrein 2) KLK2, nicotinamide -N-methyl
 CC transferase (NNMT), NADPH quinone oxidoreductase 2 (NQO2),
 CC sulfoltransferase thermolabile (STM), UDP-glucuronosyl transferase 2B4
 CC (UGT2B4), UDP-glucuronosyl transferase 2B7 (UGT2B7), UDP-glucuronosyl
 CC transferase (UGT2B15), uronkinase receptor (uPA), multidrug resistance 1
 CC (MDR1), lactotransferrin (LTF), multidrug resistance associated protein 3
 CC (MRP3), orphan nuclear receptor (NR1I2), or acetylcholine muscarinic
 CC receptor 1, 2, 3, 4, or 5 (CHMR1, CHMR2, CHMR3, CHMR4 or CHMR5) sequence.
 CC The polymorphisms in the human genes cited in the invention are useful as
 CC genetic linkage markers for locating and characterizing the genes that
 CC are responsible for specific traits within the genome and eventually
 CC identifying the genes responsible for a variety of disorder-related
 CC traits as a result of their e.g., overexpression, constitutive
 CC expression, mutation or underexpression, which may be used in diagnosing

CC and/or treating the disorders. The nucleic acid molecules comprising the
 CC polymorphic sequences contained in CYP4501A1, CYP4501A2, CYP4502E1,
 CC ARNT, EPHX2, GST12, NNMT, NQO2, NR1I2, STM, UGT2B4, UGT2B15, AHR,
 CC MDR1 and/or MDR3 are useful for screening individuals for altered drug
 CC metabolism. The polymorphic sequences contained in CYP4501A1, CYP4501A2,
 CC AHR, MDR1 and/or MDR3 may also be used to screen individuals for
 CC susceptibility to cancer. Polymorphic sequences in ADRB1 or CHMR2 are
 CC used to screen for altered cardiovascular function, in COX2 for altered
 CC susceptibility to colorectal tumours, in DBI or CHMR1 for altered central
 CC nervous system function, in FLAP and NNMT for altered pulmonary,
 CC immunological or haematological function, in KLK2 for altered serine
 CC protease activity in the prostate, in LTF for altered immunological or
 CC haematological function, in CHMR3, CHMR4 or CHMR5 for altered central and
 CC peripheral nervous system function. The present sequence represents a PCR
 CC primer used to amplify the sequences of the invention
 XX Sequence 21 BP; 9 A; 2 C; 3 G; 7 T; 0 U; 0 Other;
 SQ Query Match 0.7%; Score 13.8; DB 1; Length 21;
 Best Local Similarity 88.2%; Pred. No. 1.1e+03;
 Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1579 ATATTTTCTATTCTCT 1595
 DB 17 ATATTTTCTATTCTCACT 1
 RESULT 1133
 ABS98126/c
 ID ABS98126 standard; DNA; 21 BP.
 XX AC ABS98126;
 XX DT 23-DEC-2002 (first entry)
 XX DE Human multidrug resistance gene polymorphic sequence #28.
 XX Human; ds; cytochrome P450 A1; UGT2B4; MDR1;
 KW cytochrome P450 A2; CYP4501A2; cytochrome P450 02E; CYP45002E1; LTF;
 KW adrenergic receptor beta1; ADRB1; aryl hydrocarbon; AHR; MRP3; NR1I2;
 KW aryl hydrocarbon receptor nuclear translocator; ARNT; cathepsin S; CTSS;
 KW cyclooxygenase 2; COX2; diazepam binding inhibitor; DBI; haematological;
 KW epoxide hydroxylase 2; EPHX2; 5-lipoxygenase activating protein; FLAP;
 KW glutathione-S-transferase 12; GST12; histamine-N-methyl transferase;
 KW NNMT; kallikrein 2; KLK2; nicotinamide-N-methyl transferase; NNMT;
 KW NADPH quinone oxidoreductase 2; NQO2; sulfoltransferase thermolabile; STM;
 KW UDP-glucuronosyl transferase 2B4; UDP-glucuronosyl transferase 2B7;
 KW UGT2B7; UDP-glucuronosyl transferase; UGT2B15; uronkinase receptor; uPA;
 KW multidrug resistance 1; lactotransferrin; orphan nuclear receptor;
 KW multidrug resistance associated protein 3; cancer; prostate;
 KW acetylcholine muscarinic receptor; CHMR1; CHMR2; CHMR3; CHMR4; CHMR5;
 KW altered drug metabolism; cardiovascular function; colorectal tumour;
 KW central nervous system; pulmonary; immunological; SNP;
 KW single nucleotide polymorphism.
 XX Homo sapiens.
 XX OS WO200257410-A2.
 XX PD 25-JUL-2002.
 XX PF 28-NOV-2001; 2001WO-US044838.
 XX PR 28-NOV-2000; 2000US-00724389.
 XX PA (DNAS-) DNA SCI LAB INC.
 XX PI Guida M, Hall J;
 XX WPI; 2002-698522/75.
 XX Isolated nucleic acid molecules having polymorphisms in known human genes
 PT e.g. cytochrome p450 and cathepsin S useful as genetic linkage markers
 PT for locating, identifying and characterizing the genes responsible for
 PT disorder-related traits.
 XX Example 6; Page 109; 714pp; English.
 XX This invention relates to the sequence of an isolated nucleic acid
 CC molecule comprising at least one base variation from that of a known
 CC human cytochrome P450 A1 (CYP4501A1), cytochrome P450 A2 (CYP4501A2),
 CC cytochrome P450 02E1 (CYP45002E1), adrenergic receptor beta1 (ADRB1),
 CC aryl hydrocarbon (AHR), aryl hydrocarbon receptor nuclear translocator
 CC (ARNT), cathepsin S (CTSS), cyclooxygenase 2 (COX2), diazepam binding
 CC inhibitor (DBI), epoxide hydroxylase 2 (EPHX2), 5-lipoxygenase activating
 CC protein (FLAP), glutathione-S-transferase 12 (GST12), histamine-N-methyl
 CC transferase (NNMT), (kallikrein 2) KLK2, nicotinamide -N-methyl
 CC transferase (NNMT), NADPH quinone oxidoreductase 2 (NQO2),
 CC sulfoltransferase thermolabile (STM), UDP-glucuronosyl transferase 2B4
 CC (UGT2B4), UDP-glucuronosyl transferase 2B7 (UGT2B7), UDP-glucuronosyl
 CC transferase (UGT2B15), uronkinase receptor (uPA), multidrug resistance 1
 CC (MDR1), lactotransferrin (LTF), multidrug resistance associated protein 3
 CC (MRP3), orphan nuclear receptor (NR1I2), or acetylcholine muscarinic
 CC receptor 1, 2, 3, 4, or 5 (CHMR1, CHMR2, CHMR3, CHMR4 or CHMR5) sequence.
 CC The polymorphisms in the human genes cited in the invention are useful as
 CC genetic linkage markers for locating and characterizing the genes that
 CC are responsible for specific traits within the genome and eventually
 CC identifying the genes responsible for a variety of disorder-related
 CC traits as a result of their e.g., overexpression, constitutive
 CC expression, mutation or underexpression, which may be used in diagnosing

PT for locating, identifying and characterizing the genes responsible for
PT disorder-related traits.
XX
PS Example 22; Page 143; 714pp; English.
XX
CC This invention relates to the sequence of an isolated nucleic acid
CC molecule comprising at least one base variation from that of a known
CC human cytochrome P450 A1 (CYP450A1), cytochrome P450 A2 (CYP450A2),
CC cytochrome P450 02E1 (CYP45002E1), adrenergic receptor beta1 (ADBR1),
CC aryl hydrocarbon (AHR), aryl hydrocarbon receptor nuclear translocator
CC (ARNT), cathepsin S (CTSS), cyclooxygenase 2 (COX2), diazepam binding
CC inhibitor (DBI), epoxide hydroxylase 2 (EPHX2), 5-lipoxygenase activating
CC protein (FLAP), glutathione-S-transferase 12 (GST12), histamine-N-methyl
CC transferase (HNMT), kallikrein 2) KLK2, nicotinamide -N-methyl
CC sulfoltransferase (NNMT), NADPH quinone oxidoreductase 2 (NQO2),
CC sulfoltransferase thermolabile (STM), UDP-glucuronosyl transferase 2B4
CC (UGT2B4), UDP-glucuronosyl transferase 2B7 (UGT2B7), UDP-glucuronosyl
CC transferase (UGT2B15), urokinase receptor (uPA), multidrug resistance 1
CC (MDR1), lactotransferrin (LTF), multidrug resistance associated protein 3
CC (MRP3), orphan nuclear receptor (NR1I2), or acetylcholine muscarinic
CC receptor 1, 2, 3, 4, or 5 (CHMR1, CHMR2, CHMR3, CHMR4 or CHMR5) sequence.
CC The polymorphisms in the human genes cited in the invention are useful as
CC genetic linkage markers for locating and characterizing the genes that
CC are responsible for specific traits within the genome and eventually
CC identifying the genes responsible for a variety of disorder-related
CC traits as a result of their e.g., overexpression, constitutive
CC expression, mutation or underexpression, which may be used in diagnosing
CC and/or treating the disorders. The nucleic acid molecules comprising the
CC polymorphic sequences contained in CYP450A1, CYP450A2, CYP4502E1,
CC ARNT, EPHX2, GST12, NNMT, NQO2, NR1I2, STM, UGT2B4, UGT2B7, UGT2B15, AHR,
CC MDR1 and/or MDR3 are useful for screening individuals for altered drug
CC metabolism. The polymorphic sequences contained in CYP450A1, CYP450A2,
CC AHR, MDR1 and/or MDR3 may also be used to screen individuals for
CC susceptibility to cancer. Polymorphic sequences in ADRB1 or CHMR2 are
CC used to screen for altered cardiovascular function, in COX2 for altered
CC central and/or peripheral nervous system function, in DBI or CHMR1 for altered central
CC immunological or haematological function, in KLK2 for altered serine
CC protease activity in the prostate, in LTF for altered immunological or
CC haematological function, in CHMR3, CHMR4 or CHMR5 for altered central and
CC peripheral nervous system function. The present sequence represents a
CC polymorphic DNA sequence of the invention
XX
SQ Sequence 21 BP; 8 A; 2 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1051 TACATGACTACTTTGA 1067
DB 17 TACATGACTACTTTTA 1

RESULT 1134
ABS97856/C
ID ABS97856 standard; DNA; 21 BP.
XX
AC ABS97856;
DT
DT 23-DEC-2002 (first entry)
XX
DE Human sulfoltransferase thermolabile (STM) gene polymorphic sequence #2.
XX
KW Human; ds; cytochrome P450 A1; CYP450A1; UGT2B4; MDR1;
KW cytochrome P450 A2; CYP450A2; cytochrome P450 02E1; CYP45002E1; LTF;
KW adrenergic receptor beta1; ADRB1; aryl hydrocarbon; AHR; MRP3; NR1I2;
KW aryl hydrocarbon receptor nuclear translocator; ARNT; cathepsin S; CTSS;
KW cyclooxygenase 2; COX2; diazepam binding inhibitor; DBI; haematological;
KW epoxide hydroxylase 2; EPHX2; 5-lipoxygenase activating protein; FLAP;
KW glutathione-S-transferase 12; GST12; histamine-N-methyl transferase;
KW HNMT; kallikrein 2; KLK2; nicotinamide-N-methyl transferase; NNMT;
KW NADPH quinone oxidoreductase 2; NQO2; sulfoltransferase thermolabile; STM;

KW UDP-glucuronosyl transferase 2B4; UDP-glucuronosyl transferase 2B7;
KW UGT2B7; UDP-glucuronosyl transferase; UGT2B15; urokinase receptor; uPA;
KW multidrug resistance 1; lactotransferrin; orphan nuclear receptor;
KW multidrug resistance associated protein 3; cancer; prostate;
KW acetylcholine muscarinic receptor; CHMR1; CHMR2; CHMR3; CHMR4; CHMR5;
KW altered drug metabolism; cardiovascular function; colorectal tumour;
KW central nervous system; pulmonary; immunological; SNP;
XX single nucleotide polymorphism.
OS Homo sapiens.
XX WO200257410-A2.
XX 25-JUL-2002.
XX 28-NOV-2001; 2001WO-US044838.
XX 28-NOV-2000; 2000US-00724389.
XX (DNAS-) DNA SCI LAB INC.
XX Guida M, Hall J;
XX WPI; 2002-698522/75.
XX Isolated nucleic acid molecules having polymorphisms in known human genes
XX e.g. cytochrome p450 and cathepsin S useful as genetic linkage markers
XX for locating, identifying and characterizing the genes responsible for
XX disorder-related traits.
XX Example 17; Page 132; 714pp; English.
XX
CC This invention relates to the sequence of an isolated nucleic acid
CC molecule comprising at least one base variation from that of a known
CC human cytochrome P450 A1 (CYP450A1), cytochrome P450 A2 (CYP450A2),
CC cytochrome P450 02E1 (CYP45002E1), adrenergic receptor beta1 (ADBR1),
CC aryl hydrocarbon (AHR), aryl hydrocarbon receptor nuclear translocator
CC (ARNT), cathepsin S (CTSS), cyclooxygenase 2 (COX2), diazepam binding
CC inhibitor (DBI), epoxide hydroxylase 2 (EPHX2), 5-lipoxygenase activating
CC protein (FLAP), glutathione-S-transferase 12 (GST12), histamine-N-methyl
CC transferase (NNMT), NADPH quinone oxidoreductase 2 (NQO2),
CC sulfoltransferase thermolabile (STM), UDP-glucuronosyl transferase 2B4
CC (UGT2B4), UDP-glucuronosyl transferase 2B7 (UGT2B7), UDP-glucuronosyl
CC transferase (UGT2B15), urokinase receptor (uPA), multidrug resistance 1
CC (MDR1), lactotransferrin (LTF), multidrug resistance associated protein 3
CC (MRP3), orphan nuclear receptor (NR1I2), or acetylcholine muscarinic
CC receptor 1, 2, 3, 4, or 5 (CHMR1, CHMR2, CHMR3, CHMR4 or CHMR5) sequence.
CC The polymorphisms in the human genes cited in the invention are useful as
CC genetic linkage markers for locating and characterizing the genes that
CC are responsible for specific traits within the genome and eventually
CC identifying the genes responsible for a variety of disorder-related
CC traits as a result of their e.g., overexpression, constitutive
CC expression, mutation or underexpression, which may be used in diagnosing
CC and/or treating the disorders. The nucleic acid molecules comprising the
CC polymorphic sequences contained in CYP450A1, CYP450A2, CYP4502E1,
CC ARNT, EPHX2, GST12, NNMT, NQO2, NR1I2, STM, UGT2B4, UGT2B7, UGT2B15, AHR,
CC MDR1 and/or MDR3 are useful for screening individuals for altered drug
CC metabolism. The polymorphic sequences contained in CYP450A1, CYP450A2,
CC AHR, MDR1 and/or MDR3 may also be used to screen individuals for
CC susceptibility to cancer. Polymorphic sequences in ADRB1 or CHMR2 are
CC used to screen for altered cardiovascular function, in COX2 for altered
CC central and/or peripheral nervous system function, in DBI or CHMR1 for altered central
CC immunological or haematological function, in KLK2 for altered serine
CC protease activity in the prostate, in LTF for altered immunological or
CC haematological function, in CHMR3, CHMR4 or CHMR5 for altered central and
CC peripheral nervous system function. The present sequence represents a
CC polymorphic DNA sequence of the invention
XX
SQ Sequence 21 BP; 5 A; 6 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1051 TACATGACTACTTTGA 1067
DB 17 TACATGACTACTTTTA 1

RESULT 1134
ABS97856/C
ID ABS97856 standard; DNA; 21 BP.
XX
AC ABS97856;
DT
DT 23-DEC-2002 (first entry)
XX
DE Human sulfoltransferase thermolabile (STM) gene polymorphic sequence #2.
XX
KW Human; ds; cytochrome P450 A1; CYP450A1; UGT2B4; MDR1;
KW cytochrome P450 A2; CYP450A2; cytochrome P450 02E1; CYP45002E1; LTF;
KW adrenergic receptor beta1; ADRB1; aryl hydrocarbon; AHR; MRP3; NR1I2;
KW aryl hydrocarbon receptor nuclear translocator; ARNT; cathepsin S; CTSS;
KW cyclooxygenase 2; COX2; diazepam binding inhibitor; DBI; haematological;
KW epoxide hydroxylase 2; EPHX2; 5-lipoxygenase activating protein; FLAP;
KW glutathione-S-transferase 12; GST12; histamine-N-methyl transferase;
KW HNMT; kallikrein 2; KLK2; nicotinamide-N-methyl transferase; NNMT;
KW NADPH quinone oxidoreductase 2; NQO2; sulfoltransferase thermolabile; STM;

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Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1018 GCCCTGGATACGGAGAT 1034
Db 17 GCCCTGGATGCTGAGAT 1

RESULT 1135
ABK29205/c
ID ABK29205 standard; DNA; 21 BP.
XX
AC ABK29205;
XX
DT 23-APR-2002 (first entry)
XX
DE Scopulariopsis chartarum forward PCR primer.
XX
KW Fungal detection; bacterial detection; probe; primer; ss.
XX
OS Scopulariopsis chartarum.
XX
PN WO200196612-A2.
XX
PD 20-DEC-2001.
XX
PF 13-JUN-2001; 2001WO-US018892.
XX
PR 13-JUN-2000; 2000US-00593012.
XX
PA (USSI ) US ENVIRONMENTAL PROTECTION AGENCY.
XX
PI Haugland R, Vesper SJ;
XX
DR WPI; 2002-098078/13.
XX
PT Detecting and quantifying fungi and bacteria, involves obtaining a
PT sequence of the fungus, extracting the DNA from the sample, and
PT subjecting the DNA to polymerase chain reaction and fluorescent probe
PT analysis.
XX
PS Claim 60; Page 20; 110pp; English.
XX
CC The invention relates to a method of detecting and quantifying fungi and
CC bacteria, involving obtaining a sequence of the microorganism to be
CC detected and quantified, extracting the DNA from the sample, and
CC subjecting the DNA to polymerase chain reaction (PCR) and fluorescent
CC probe analysis. The method is useful for identifying and quantifying
CC specific fungi and bacteria using specific DNA sequences. The specific
CC DNA sequences are useful for the real time detection of PCR products with
CC a fluorogenic probe system or other molecular probes like hybridisation.
CC ABK29026-ABK29474 represent fungal and bacterial PCR primers and probes
CC used in the method of the invention
XX
SQ Sequence 21 BP; 5 A; 7 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 99 TTACTACTACGACGGGG 115
Db 18 TTACTACTACGACGGGG 2

RESULT 1136
ABS66956
ID ABS66956 standard; DNA; 21 BP.
XX
AC ABS66956;
XX
DT 29-NOV-2002 (first entry)
XX

Human MRP-1 polymorphic DNA region #221.
Human; multidrug resistance-associated protein 1; MRP-1; ss; cancer;
renal cancer; cytostatic; single nucleotide polymorphism.
Homo sapiens.
WO200259142-A2.
01-AUG-2002.
25-JAN-2002; 2002WO-EP000796.
26-JAN-2001; 2001EP-00101651.
(EPID-) EPIDAUROS BIOTECHNOLOGIES AG.
Brinkmann U, Hoffmeyer S, Mornhinweg E;
WPI; 2002-657475/70.
Novel multidrug resistance-associated protein 1 polynucleotide useful for
diagnosis and treatment of cancer and multidrug resistance related
diseases, and for identifying single nucleotide polymorphisms.
Claim 1; Page 81; 198pp; English.
The invention relates to a multidrug resistance-associated protein 1 (MRP
-1) polynucleotide. The polynucleotide is useful in an in vitro method
for identifying a single nucleotide polymorphism and for identifying and
obtaining a pro-drug or drug capable of modulating the activity of a
molecular variant of MRP-1 or for identifying and obtaining an inhibitor
of the activity of a molecular variant of MRP-1. The sequences are useful
for diagnosing a disorder related to the presence of a molecular variant
of MRP-1 or susceptibility to such a disorder, where the disorder is
cancer (particularly renal cancer) or a disease related to multidrug
resistance. This sequence represents a human MRP-1 polymorphic DNA region
Sequence 21 BP; 3 A; 7 C; 8 G; 3 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1008 GACAGCTGTGCGCCTGG 1024
Db 5 GGCAGCTGTGACCTGG 21

RESULT 1137
ABS66957/c
ID ABS66957 standard; DNA; 21 BP.
XX
AC ABS66957;
XX
DT 29-NOV-2002 (first entry)
XX
DE Human MRP-1 polymorphic DNA region #222.
XX
KW Human; multidrug resistance-associated protein 1; MRP-1; ss; cancer;
KW renal cancer; cytostatic; single nucleotide polymorphism.
XX
OS Homo sapiens.
XX
PN WO200259142-A2.
XX
PD 01-AUG-2002.
XX
PF 25-JAN-2002; 2002WO-EP000796.
XX
PR 26-JAN-2001; 2001EP-00101651.
XX
PA (EPID-) EPIDAUROS BIOTECHNOLOGIES AG.

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XX Brinkmann U, Hoffmeyer S, Mornhinweg E;
XX WPI; 2002-657475/70.
XX Novel multidrug resistance-associated protein 1 polynucleotide useful for
PT diagnosis and treatment of cancer and multidrug resistance related
PT diseases, and for identifying single nucleotide polymorphisms.
XX Claim 1; Page 81; 198pp; English.
XX The invention relates to a multidrug resistance-associated protein 1 (MRP
CC -1) polynucleotide. The polynucleotide is useful in an in vitro method
CC for identifying a single nucleotide polymorphism and for identifying and
CC obtaining a pro-drug or drug capable of modulating the activity of a
CC molecular variant of MRP-1 or for identifying and obtaining an inhibitor
CC of the activity of a molecular variant of MRP-1. The sequences are useful
CC for diagnosing a disorder related to the presence of a molecular variant
CC of MRP-1 or susceptibility to such a disorder, where the disorder is
CC cancer (particularly renal cancer) or a disease related to multidrug
CC resistance. This sequence represents a human MRP-1 polymorphic DNA region
XX
XX Sequence 21 BP; 3 A; 8 C; 7 G; 3 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1008 GACAGCTGTGGCCTGG 1024
Db 17 GGAGCTGTGGACCTGG 1

RESULT 1138
ABS54556
ID ABS54556 standard; DNA; 21 BP.
AC ABS54556;
XX
XX 26-NOV-2002 (first entry)
DT
DE Interaction inhibitor identification method sense PCR primer 23223.
XX
XX U binding protein; Ubp; viral protein U; Vpu; Gag; HIV;
KW anti-human immunodeficiency virus; protein-protein interaction;
XX interaction inhibitor; PCR; primer; ss.
OS Synthetic.
XX
XX US2002115830-A1.
PN
XX 22-AUG-2002.
PD
XX 04-MAR-2002; 2002US-00090378.
PF
XX 30-APR-1998; 98US-0083567P.
PR
XX 29-APR-1999; 99US-00301978.
XX
XX (PANG/) PANGANIBAN A T.
PA (CALL/) CALLAHAN M A.
PA (HAND/) HANDLEY M A.
XX
XX Panganiban AT, Callahan MA, Handley MA;
PI WPI; 2002-706444/76.
XX
XX Identifying U binding protein (Ubp) and viral protein U (Vpu) or Gag
PT interaction modulators, for detecting anti-human immunodeficiency virus
PT drugs, comprises exposing Ubp and Gag or Vpu, with an inhibitor and
PT testing for interactions.
XX
XX Example; Page 4; 30pp; English.
PS
XX

CC The present invention relates to a new assay to identify modulators of
CC the interaction of U binding protein (Ubp) and viral protein U (Vpu) or
CC Ubp and Gag. The method of the invention involves exposing Vpu and Ubp,
CC or Ubp and Gag, together in the presence of a candidate inhibitor under
CC conditions in which Vpu and Ubp, or Ubp and Gag, can interact when an
CC inhibitor is not present, and determining whether Vpu/Ubp or Gag/Ubp
CC interaction occurs. The method is useful for identifying modulators of
CC Ubp/Vpu or Gag/Ubp interaction. The method is also useful to identify
CC potential anti-human immunodeficiency virus (HIV) therapeutics. The
CC method allows rapid and straightforward examination of mutants and
CC reagents that affect protein-protein interaction. The present nucleic
CC acid sequence represents a PCR primer that was used in the methods of the
CC invention for amplification of plasmid DNA,
XX
XX Sequence 21 BP; 8 A; 4 C; 8 G; 1 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1446 AGAGGAGAAACCAAGG 1462
Db 5 AGATGAGAGACCAAGG 21

RESULT 1139
ABK12106
ID ABK12106 standard; cDNA; 21 BP.
XX
XX ABK12106;
DT 29-AUG-2003 (revised)
DT 05-JUN-2002 (first entry)
XX
XX HIV Gag PCR primer 23233.
DE
XX
XX PCR; ss; gene; Viral protein U binding protein; Ubp; Vpu; primer;
KW human immunodeficiency virus; HIV-1; CD4; Gag; anti-HIV; viral titre.
XX
XX Human immunodeficiency virus 1.
OS
XX
XX US2002022221-A1.
PN
XX 21-FEB-2002.
PD
XX 29-APR-1999; 99US-00301978.
PF
XX 30-APR-1998; 98US-0083567P.
PR
XX (PANG/) PANGANIBAN A T.
PA (CALL/) CALLAHAN M A.
PA (HAND/) HANDLEY M A.
XX
XX Panganiban AT, Callahan MA, Handley MA;
PI WPI; 2002-267445/31.
XX
XX New preparation of viral protein U (Vpu) binding protein (Ubp), for
PT identifying modulators of interaction between Vpu and Ubp, and between
PT Gag and Ubp.
XX
XX Example 2; Page 4; 29pp; English.
PS
XX
XX The invention relates to a preparation of viral protein U (Vpu) binding
CC protein (Ubp), where Vpu is encoded by human immunodeficiency virus (HIV)
CC -1 that promotes degradation of virus receptor, CD4, and enhances release
CC of virus particles from cells. Also included are the gene sequence and
CC protein sequence of human Ubp, a method of identifying
CC modulators/inhibitors of the Ubp/Vpu interaction comprising: (a) exposing
CC Vpu and Ubp together in the presence of a candidate inhibitor/modulator
CC under conditions where Vpu and Ubp can interact when an inhibitor is not
CC present; and (b) determining whether Vpu/Ubp interaction occurs, an
CC inhibitor of Ubp/Vpu interaction or Gag/Ubp interaction, an anti-Ubp


```
XX 20-NOV-2003 (first entry)
XX MRP1 based cancer related nucleic acid SEQ ID NO:193.
XX
XX irinotecan; colorectal cancer; cervical cancer; gastric cancer;
XX lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
XX variant allele; multidrug resistance protein 1; MRP1; cytosolic; gene;
XX ds.
XX
XX Unidentified.
XX
XX WO2003013533-A2.
XX
XX 20-FEB-2003.
XX
XX 23-JUL-2002; 2002WO-EP008200.
XX
XX 23-JUL-2001; 2001EP-00117608.
XX
XX 24-MAY-2002; 2002EP-00011710.
XX
XX (EPID-) EPIDAUS BIOTECHNOLOGIE AG.
XX
XX Heinrich G, Korb R;
XX
XX WPI; 2003-354397/33.
XX
XX Use of irinotecan or its derivative for preparation of a pharmaceutical
XX composition for treating cancer in a subject having a genome with a
XX variant allele comprising a multidrug resistance protein 1
XX polynucleotide.
XX
XX Claim 8; Page 46; 100pp; English.
XX
XX The present invention describes a method for the use of irinotecan (I) or
XX its derivative for the preparation of a pharmaceutical composition for
XX treating colorectal, cervical, gastric, lung, ovarian or pancreatic
XX cancer, or malignant glioma in a subject having a genome with a variant
XX allele which comprises a multidrug resistance protein 1 (MRP1)
XX polynucleotide (II). (I) has cytostatic activity. (I) or its derivative
XX can be used for the preparation of a pharmaceutical composition for
XX treating colorectal, cervical, gastric, lung, ovarian or pancreatic
XX cancer, or malignant glioma in a subject, where the subject is a human
XX (preferably African or Asian) or a mouse. The present sequence represents
XX a sequence which is used in the exemplification of the present invention.
XX
XX Sequence 21 BP; 3 A; 7 C; 8 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 13.8; DB 1; Length 21;
XX Best Local Similarity 88.2%; Pred. No. 1.1e+03;
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX Qy 1008 GACAGCTGTGGCCCTGG 1024
XX | ||||| |||||
XX Db 5 GGCAGCTGTGGACCTGG 21
XX
XX RESULT 1145
XX ADB88125/C
XX ID ADB88125 standard; DNA; 21 BP.
XX
XX AC ADB88125;
XX
XX 04-DEC-2003 (first entry)
XX
XX Human UGT1A1 variant allele sequence fragment SEQ ID NO:166.
XX
XX ss; irinotecan; cancer; UGT1A1; cytosolic; topoisomerase I inhibitor;
XX colorectal cancer; cervical cancer; gastric cancer; lung cancer;
XX ovarian cancer; pancreatic cancer; malignant glioma;
XX uridine diphosphate glycosyltransferase 1 member A1.
XX
XX Homo sapiens.
XX
XX OS
```

```
XX WO2003013536-A2.
XX
XX 20-FEB-2003.
XX
XX 23-JUL-2002; 2002WO-EP008217.
XX
XX 23-JUL-2001; 2001EP-00117608.
XX
XX 24-MAY-2002; 2002EP-00011710.
XX
XX (EPID-) EPIDAUS BIOTECHNOLOGIE AG.
XX
XX Heinrich G, Korb R;
XX
XX WPI; 2003-289896/28.
XX
XX Use of irinotecan to treat cancer patient by determining if patient has
XX variant alleles of UGT1A1 gene, administering increased/decreased amounts
XX of irinotecan based on increased/decreased levels of UGT1A1 gene product.
XX
XX Disclosure; Page 50; 107pp; English.
XX
XX The invention relates to the novel use of irinotecan to treat a patient
XX suffering from cancer. This involves determining if the patient has one
XX or more variant alleles of the UGT1A1 gene, and if the patient has one or
XX more of such variant alleles, irinotecan is administered in an increased
XX or decreased amount in comparison to the amount that is administered
XX without regard to the patient's alleles in the UGT1A1 gene. The invention
XX has cytostatic activity. A composition of the invention acts as a
XX topoisomerase I inhibitor. The method is useful for treating a patient,
XX an animal e.g. mouse or a human, preferably African or Asian, suffering
XX from cancer such as colorectal, cervical, gastric cancer, lung, ovarian,
XX pancreatic cancer or malignant glioma. The present sequence is used in
XX the exemplification of the invention.
XX
XX Sequence 21 BP; 3 A; 8 C; 7 G; 3 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 13.8; DB 1; Length 21;
XX Best Local Similarity 88.2%; Pred. No. 1.1e+03;
XX Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
XX
XX Qy 1008 GACAGCTGTGGCCCTGG 1024
XX | ||||| |||||
XX Db 17 GGCAGCTGTGGACCTGG 1
XX
XX RESULT 1146
XX ADB88124
XX ID ADB88124 standard; DNA; 21 BP.
XX
XX AC ADB88124;
XX
XX 04-DEC-2003 (first entry)
XX
XX Human UGT1A1 variant allele sequence fragment SEQ ID NO:165.
XX
XX ss; irinotecan; cancer; UGT1A1; cytosolic; topoisomerase I inhibitor;
XX colorectal cancer; cervical cancer; gastric cancer; lung cancer;
XX ovarian cancer; pancreatic cancer; malignant glioma;
XX uridine diphosphate glycosyltransferase 1 member A1.
XX
XX Homo sapiens.
XX
XX OS
XX WO2003013536-A2.
XX
XX 20-FEB-2003.
XX
XX 23-JUL-2002; 2002WO-EP008217.
XX
XX 23-JUL-2001; 2001EP-00117608.
XX
XX 24-MAY-2002; 2002EP-00011710.
XX
XX (EPID-) EPIDAUS BIOTECHNOLOGIE AG.
XX
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```
SQ Sequence 21 BP; 3 A; 7 C; 8 G; 3 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1008 GACAGCTGTGGCCCTGG 1024
| ||||| |||||
Db 5 GGCAGCTGTGGACCTGG 21

RESULT 1149
ADB92298
ID ADB92298 standard; DNA; 21 BP.
AC ADB92298;
XX
XX
DT 04-DEC-2003 (first entry)
DX
DE Human MRPI variant allele sequence fragment SEQ ID NO:193.
XX
XX irinotecan; colorectal cancer; cervical cancer; gastric cancer;
KW lung cancer; ovarian cancer; pancreatic cancer; malignant glioma;
KW multidrug resistance 1; MDR1; cytosstatic; ds; human; UGT1A1; MRPI; TOP1.
XX
XX Homo sapiens.
OS
XX
XX WO2003013535-A2.
FN
XX
XX 20-FEB-2003.
PD
XX
XX 23-JUL-2002; 2002WO-EP008220.
PF
XX
XX 23-JUL-2001; 2001EP-00117608.
PR
XX 24-MAY-2002; 2002EP-00011710.
PR
XX
XX (EPID-) EPIDAUROS BIOTECHNOLOGIE AG.
PA
XX
XX Heinrich G, Kerb R;
XX
XX WPI; 2003-342400/32.
DR
XX
XX New use of irinotecan for preparation of pharmaceutical compositions for
PT treating cancer in subject having genome with variant allele comprising
PT multidrug resistance 1 polynucleotide.
XX
XX Disclosure; Page 46; 104pp; English.
PS
XX
XX The invention relates to a novel use of irinotecan or its derivative for
CC the preparation of a pharmaceutical composition for treating colorectal,
CC cervical, gastric, lung, ovarian or pancreatic cancer, or malignant
CC glioma in a subject having a genome with a variant allele which comprises
CC a multidrug resistance 1 (MDR1) polynucleotide. A composition of the
CC invention has cytostatic activity. The present sequence is used in the
CC exemplification of the invention.
XX
XX Sequence 21 BP; 3 A; 8 C; 7 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1008 GACAGCTGTGGCCCTGG 1024
| ||||| |||||
Db 17 GGCAGCTGTGGACCTGG 1

RESULT 1151
ADE78182
ID ADE78182 standard; DNA; 21 BP.
XX
XX ADE78182;
AC
XX
XX 29-JAN-2004 (first entry)
DT
XX
XX DNA oligo (SeqID 433) encodes peptide that binds atherosclerotic lesions.
DE
XX
XX ss; gene; atherosclerotic lesion; antiatherosclerotic; cerebroprotective;
KW antianginal; thrombolytic; cardiant; ophthalmological; neuroprotective;
KW nephrotropic; vasotropic; atherosclerosis; stroke; angina; thrombosis;
KW myocardial infarction; ischaemic heart disease;
KW transplantation-induced sclerosis; intermittent claudication; diabetes;
KW peripheral artery disease; congestive heart failure; retinopathy;
KW neuropathy; nephropathy; thrombosis.
XX
XX Synthetic.
OS
XX
XX WO2003014145-A2.
PN
XX
XX 20-FEB-2003.
PD
```

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XX 09-AUG-2002; 2002WO-EP008942.
PF
XX
XX 10-AUG-2001; 2001US-0311507P.
XX
XX (NOVS ) NOVARTIS AG.
PA (NOVS ) NOVARTIS PHARMA GMBH.
PA (SCRI ) SCRIPPS RES INST.
XX
XX Liu C, Edgington TS, Prescott MF;
PI
XX WPI: 2003-278468/27.
XX P-PSDB; ADE77954.
DR
XX
XX Novel peptide which selectively bind to mammalian atherosclerotic
PT lesions, useful for treating atherosclerosis in a mammal, and for
PT identifying location of atherosclerotic lesion in mammal.
XX
XX Claim 16; SEQ ID NO 433; 286pp; English.
PS
XX This invention relates to novel isolated peptides that selectively bind
CC to mammalian atherosclerotic lesions and as such can be used to detect
CC and/or treat vascular problems. Specifically, it refers to methods for
CC the in vivo identification of such peptides by using phage display
CC libraries, and also methods for identifying the targets of biomolecules
CC bound by the peptides. Diagnosis of pathological conditions of the
CC endothelial tissue occurs by administration of a peptide conjugated to a
CC reporter molecule or therapeutic agent. As such, these peptides can be
CC described variously as antiatherosclerotic, cerebroprotective,
CC antianginal, thrombolytic, cardiant, ophthalmological, neuroprotective,
CC nephrotropic and vasotropic. The present invention describes these
CC peptides as useful for treating atherosclerosis, as well as identifying
CC the location and severity of an atherosclerotic lesion in a mammal.
CC Atherosclerosis causes stroke, angina, thrombosis, myocardial infarction,
CC intermittent claudication. Furthermore, it is associated with diabetes,
CC which in turn can lead to peripheral artery disease, congestive heart
CC failure, retinopathy, neuropathy, nephropathy or thrombosis. This
CC oligonucleotide sequence, isolated from a combinatorial phage display
CC library, encodes a peptide that binds to atherosclerotic lesions, the aim
CC of the invention.
XX
XX Sequence 21 BP; 5 A; 4 C; 8 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1017 GGCCCTGGATACGGAGA 1033
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
3 GGCTCTGGATACGGCGA 19

RESULT 1152
ADE77954
ID ADE77954 standard; DNA; 21 BP.
XX
XX ADE77954;
AC
XX
XX 29-JAN-2004 (first entry)
DT
XX
XX DNA oligo (SeqID 205) encodes peptide that binds atherosclerotic lesions.
DE
XX ss; gene; atherosclerotic lesion; antiatherosclerotic; cerebroprotective;
XX antianginal; thrombolytic; cardiant; ophthalmological; neuroprotective;
XX nephrotropic; vasotropic; atherosclerosis; stroke; angina; thrombosis;
XX myocardial infarction; ischaemic heart disease;
XX transplantation-induced sclerosis; intermittent claudication; diabetes;
XX peripheral artery disease; congestive heart failure; retinopathy;
XX neuropathy; nephropathy; thrombosis.
XX
XX Synthetic.
OS
XX

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PN WO2003014145-A2.
XX
XX 20-FEB-2003.
PD
XX
XX 09-AUG-2002; 2002WO-EP008942.
XX
XX 10-AUG-2001; 2001US-0311507P.
XX
XX (NOVS ) NOVARTIS AG.
PA (NOVS ) NOVARTIS PHARMA GMBH.
PA (SCRI ) SCRIPPS RES INST.
XX
XX Liu C, Edgington TS, Prescott MF;
PI
XX WPI: 2003-278468/27.
XX P-PSDB; ADE77955.
DR
XX
XX Novel peptide which selectively bind to mammalian atherosclerotic
PT lesions, useful for treating atherosclerosis in a mammal, and for
PT identifying location of atherosclerotic lesion in mammal.
XX
XX Claim 16; SEQ ID NO 205; 286pp; English.
PS
XX This invention relates to novel isolated peptides that selectively bind
CC to mammalian atherosclerotic lesions and as such can be used to detect
CC and/or treat vascular problems. Specifically, it refers to methods for
CC the in vivo identification of such peptides by using phage display
CC libraries, and also methods for identifying the targets of biomolecules
CC bound by the peptides. Diagnosis of pathological conditions of the
CC endothelial tissue occurs by administration of a peptide conjugated to a
CC reporter molecule or therapeutic agent. As such, these peptides can be
CC described variously as antiatherosclerotic, cerebroprotective,
CC antianginal, thrombolytic, cardiant, ophthalmological, neuroprotective,
CC nephrotropic and vasotropic. The present invention describes these
CC peptides as useful for treating atherosclerosis, as well as identifying
CC the location and severity of an atherosclerotic lesion in a mammal.
CC Atherosclerosis causes stroke, angina, thrombosis, myocardial infarction,
CC intermittent claudication. Furthermore, it is associated with diabetes,
CC which in turn can lead to peripheral artery disease, congestive heart
CC failure, retinopathy, neuropathy, nephropathy or thrombosis. This
CC oligonucleotide sequence, isolated from a combinatorial phage display
CC library, encodes a peptide that binds to atherosclerotic lesions, the aim
CC of the invention.
XX
XX Sequence 21 BP; 5 A; 5 C; 7 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 13.8; DB 1; Length 21;
Best Local Similarity 88.2%; Pred. No. 1.1e+03;
Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 603 TGACGGCGTGGAGAGG 619
Db ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||
5 TGACGGCGTGGAGAGG 21

RESULT 1153
ABQ82590/c
ID ABQ82590 standard; DNA; 24 BP.
XX
XX ABQ82590;
AC
XX
XX 20-DEC-2002 (first entry)
DT
XX
XX Human carbamylaspartic dehydrase 9.46 PCR primer 2 SEQ ID NO:4.
DE
XX Human; carbamylaspartic dehydrase 9.46; enzyme; malignant tumour;
XX haemopathy; HIV infection; immunological disease; inflammation;
XX PCR primer; ss.
XX
XX Homo sapiens.
OS
XX
XX CN1352301-A.
PN

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XX PD 05-JUN-2002.
XX XX
XX PF 02-NOV-2000; 2000CN-00127141.
XX XX
XX PR 02-NOV-2000; 2000CN-00127141.
XX XX
XX PA (BODE-) BODE GENE DEV CO LTD SHANGHAI.
XX XX
XX PI Mao Y, Xie Y;
XX XX
XX DR WPI; 2002-644473/70.
XX XX
XX PT New polypeptide-human carbamylaspartic dehydrase 9.46 and polynucleotide
XX PT encoding the polypeptide.
XX XX
XX PS Example 2; Page 16 (Disclosure); 33pp; Chinese.
XX XX
XX CC The present invention describes human carbamylaspartic dehydrase 9.46
XX CC (I). Also described is a DNA recombination process used to produce (I).
XX CC (I) can be used in the treatment of various diseases, such as malignant
XX CC tumours, haemopathy, HIV infection, immunological diseases and various
XX CC inflammations. The present sequence represents a PCR primer for (I),
XX CC which is used in an example from the present invention
XX XX
XX SQ Sequence 24 BP; 11 A; 1 C; 1 G; 11 T; 0 U; 0 Other;
    Query Match      0.7%; Score 13.8; DB 1; Length 24;
    Best Local Similarity 88.2%; Pred. No. 1.3e+03;
    Matches 15; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1607 TAAAAATTATTAAATA 1623
Db 19 TAAAAATTTTATATATA 3

RESULT 1154
AAQ15422/c
ID AAQ15422 standard; DNA; 20 BP.
XX AC AAQ15422;
XX XX
XX DT 25-MAR-2003 (revised)
XX DT 19-MAR-1992 (first entry)
XX XX
XX DE Probe to mutant sequence #12 of exon 3 of human c-Ha-ras gene.
XX KW polymerase chain reaction; PCR; nested primer; mutation; screening;
XX KW ras oncogene; ss.
XX OS Synthetic.
XX XX
XX FH Key Location/Qualifiers
XX FT misc_feature 10..13
XX FT /*tag= a
XX FT /note= "mutant TaqI site"
XX XX
XX PN EP461496-A.
XX XX
XX PD 18-DEC-1991.
XX XX
XX PF 01-JUN-1991; 91EP-00108976.
XX XX
XX PR 08-JUN-1990; 90EP-00110907.
XX XX
XX PA (BEHW ) BEHRINGWERKE AG.
XX XX
XX PI Cerutti PA, Felleybosc E, Sandy M, Amstad P, Zijlstra J;
XX PI Pourzand C;
XX XX
XX DR WPI; 1991-370527/51.
XX XX
XX PT Quantitative determination of DNA sequences - contg. mutationally
XX PT eliminated restriction site(s), chain reaction using polymerase
XX PT amplification and elimination of wild-type sequences.
XX PS Example 2; Page 9; 16pp; English.
XX XX
XX CC This is one of 12 probes which differ only in the sequence at the TaqI
XX CC site in the wild-type c-Ha-ras corresponding to nucleotides 2508-2511.
XX CC The "mutant" probes are used to detect the 12 possible base-pair
XX CC mutations potentially induced by treatment of cells with the carcinogen
XX CC ethylnitrosurea. (Updated on 25-MAR-2003 to correct PI field.)
XX XX
XX SQ Sequence 20 BP; 4 A; 10 C; 3 G; 3 T; 0 U; 0 Other;
    Query Match      0.7%; Score 13.6; DB 1; Length 20;
    Best Local Similarity 80.0%; Pred. No. 1.1e+03;
    Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1745 CCAGGTCCTGGTGAAAGGGA 1764
Db 20 CGAGGTCCTGGATGTAGGGGA 1

RESULT 1155
AAQ15415/c
ID AAQ15415 standard; DNA; 20 BP.
XX AC AAQ15415;
XX XX
XX DT 25-MAR-2003 (revised)
XX DT 19-MAR-1992 (first entry)
XX XX
XX DE Probe to mutant sequence #5 of exon 3 of human c-Ha-ras gene.
XX KW polymerase chain reaction; PCR; nested primer; mutation; screening;
XX KW ras oncogene; ss.
XX OS Synthetic.
XX XX
XX FH Key Location/Qualifiers
XX FT misc_feature 10..13
XX FT /*tag= a
XX FT /note= "mutant TaqI site"
XX XX
XX PN EP461496-A.
XX XX
XX PD 18-DEC-1991.
XX XX
XX PF 01-JUN-1991; 91EP-00108976.
XX XX
XX PR 08-JUN-1990; 90EP-00110907.
XX XX
XX PA (BEHW ) BEHRINGWERKE AG.
XX XX
XX PI Cerutti PA, Felleybosc E, Sandy M, Amstad P, Zijlstra J;
XX PI Pourzand C;
XX XX
XX DR WPI; 1991-370527/51.
XX XX
XX PT Quantitative determination of DNA sequences - contg. mutationally
XX PT eliminated restriction site(s), chain reaction using polymerase
XX PT amplification and elimination of wild-type sequences.
XX PS Example 2; Page 9; 16pp; English.
XX XX
XX CC This is one of 12 probes which differ only in the sequence at the TaqI
XX CC site in the wild-type c-Ha-ras corresponding to nucleotides 2508-2511.
XX CC The "mutant" probes are used to detect the 12 possible base-pair
XX CC mutations potentially induced by treatment of cells with the carcinogen
XX CC ethylnitrosurea. (Updated on 25-MAR-2003 to correct PI field.)
XX XX
XX SQ Sequence 20 BP; 4 A; 10 C; 3 G; 3 T; 0 U; 0 Other;
    Query Match      0.7%; Score 13.6; DB 1; Length 20;
    Best Local Similarity 80.0%; Pred. No. 1.1e+03;
    Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

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PT eliminated restriction site(s), chain reaction using polymerase
PT amplification and elimination of wild-type sequences.
XX XX
XX PS Example 2; Page 9; 16pp; English.
XX XX
XX CC This is one of 12 probes which differ only in the sequence at the TaqI
XX CC site in the wild-type c-Ha-ras corresponding to nucleotides 2508-2511.
XX CC The "mutant" probes are used to detect the 12 possible base-pair
XX CC mutations potentially induced by treatment of cells with the carcinogen
XX CC ethylnitrosurea. (Updated on 25-MAR-2003 to correct PI field.)
XX XX
XX SQ Sequence 20 BP; 4 A; 10 C; 2 G; 4 T; 0 U; 0 Other;
    Query Match      0.7%; Score 13.6; DB 1; Length 20;
    Best Local Similarity 80.0%; Pred. No. 1.1e+03;
    Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

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Qy 1745 CCAGGTCCTGGTGAAAGGGA 1764
Db 20 CGAGGTCCTGGATGTAGGGGA 1

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RESULT 1155
AAQ15415/c
ID AAQ15415 standard; DNA; 20 BP.

```

```

XX AC AAQ15415;
XX XX
XX DT 25-MAR-2003 (revised)
XX DT 19-MAR-1992 (first entry)
XX XX
XX DE Probe to mutant sequence #5 of exon 3 of human c-Ha-ras gene.
XX KW polymerase chain reaction; PCR; nested primer; mutation; screening;
XX KW ras oncogene; ss.
XX OS Synthetic.

```

```

XX FH Key Location/Qualifiers
XX FT misc_feature 10..13
XX FT /*tag= a
XX FT /note= "mutant TaqI site"

```

```

XX PN EP461496-A.
XX XX
XX PD 18-DEC-1991.

```

```

XX PF 01-JUN-1991; 91EP-00108976.
XX XX
XX PR 08-JUN-1990; 90EP-00110907.

```

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XX PA (BEHW ) BEHRINGWERKE AG.

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XX PI Cerutti PA, Felleybosc E, Sandy M, Amstad P, Zijlstra J;
XX PI Pourzand C;

```

```

XX DR WPI; 1991-370527/51.

```

```

XX PT Quantitative determination of DNA sequences - contg. mutationally
XX PT eliminated restriction site(s), chain reaction using polymerase
XX PT amplification and elimination of wild-type sequences.

```

```

XX PS Example 2; Page 9; 16pp; English.

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```

XX CC This is one of 12 probes which differ only in the sequence at the TaqI
XX CC site in the wild-type c-Ha-ras corresponding to nucleotides 2508-2511.
XX CC The "mutant" probes are used to detect the 12 possible base-pair
XX CC mutations potentially induced by treatment of cells with the carcinogen
XX CC ethylnitrosurea. (Updated on 25-MAR-2003 to correct PI field.)

```

```

XX SQ Sequence 20 BP; 4 A; 10 C; 3 G; 3 T; 0 U; 0 Other;

```

```

    Query Match      0.7%; Score 13.6; DB 1; Length 20;

```

```
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1745 CCAGGCTCGGGTGAAGGGA 1764
Db 20 CGAGGCTCGGGTGTAGGGA 1

RESULT 1156
AAQ49670
ID AAQ49670 standard; DNA; 20 BP.
XX
AC AAQ49670;
XX
DT 25-MAR-2003 (revised)
DT 25-APR-1994 (first entry)
XX
XX PKC 3'-UTR binding oligomer 2217-2198.
XX
XX Antisense; oligonucleotide; inter-sugar linkage; protein kinase C;
KW phosphorothionate linkage; PKC; transcription initiation site;
KW translation initiation site; 5' cap region; intron/exon boundary;
KW diagnosis; therapeutics; prophylaxis; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT misc_feature 1..20
FT /*tag= a
FT /*note= "Phosphorothionate linkages"
XX
XX WO9319203-A1.
XX
PD 30-SEP-1993.
XX
XX 25-FEB-1993; 93WO-US002213.
XX
XX 16-MAR-1992; 92US-00852852.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Bennett CF, Dean N;
XX
XX WPI; 1993-320768/40.
XX
XX Oligo-nucleotide(s) able to be hybridised with nucleic acids encoding PKC
PT - useful as diagnostics and therapeutics for disease states associated
PT with particular isozymes of protein Kinase C.
XX
PS Claim 6; Page 15; 64pp; English.
XX
XX The sequences given in AAQ49657-707 are antisense oligonucleotides which
CC contain altered inter-sugar linkages, pref. phosphorothionate linkages.
CC These oligomers bind with the protein kinase C (PKC) mRNA at the
CC transcription initiation site, the translation initiation site, the 5'
CC cap region, an intron/exon boundary, coding sequences or sequences in the
CC 5'- or 3'-untranslated regions. These oligonucleotides may be used in
CC diagnostics, therapeutics, prophylaxis and as research reagents. The
CC numbers allocated to the oligonucleotides are relative to the first
CC residue to be sequenced on the cDNA, which is 28 residues upstream of the
CC ATG start codon.. (Updated on 25-MAR-2003 to correct PN field.)
XX
XX Sequence 20 BP; 9 A; 4 C; 6 G; 1 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1409 AAGAGAAAGACCCAGAGGAG 1428
Db 1 AAGAGAGAGACCCGTGAACAG 20

Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1752 TGGGTGAAGGGATACTTTT 1771
Db 1 TGTGTGAAGGGAGTCTTGT 20

Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

RESULT 1158
AAQ39547/c
ID AAQ39547 standard; DNA; 20 BP.
XX
AC AAQ39547;
```

```
RESULT 1157
AAQ39557
ID AAQ39557 standard; DNA; 20 BP.
XX
AC AAQ39557;
XX
DT 25-MAR-2003 (revised)
DT 20-MAY-1993 (first entry)
XX
XX PCR Primer #1 for mapping EST's to specific chromosome.
DE expressed sequence tag; human genome project; chromosome;
KW human gene sequencing; PCR mapping; somatic cell hybrids;
KW sublocalisation; gene tagging; tissue typing.
XX
OS Synthetic.
XX
XX WO9300353-A1.
XX
PD 07-JAN-1993.
XX
XX 19-JUN-1992; 92WO-US005222.
XX
XX 20-JUN-1991; 91US-00716831.
XX 12-FEB-1992; 92US-00837195.
XX
XX (USSH ) US DEPT HEALTH & HUMAN SERVICE.
XX
XX Venter JC, Adams MD;
XX
XX WPI; 1993-036325/04.
XX
XX Particular expressed sequence tags from human CDNA - corresponds to
PT transcription prods. of genes, useful for tagging genes, mapping
PT chromosomes and tissue typing.
XX
XX Example 3; Page 42; 199pp; English.
XX
XX This PCR primer was used together with AAQ39558 for the PCR mapping of
CC somatic cell hybrids. This is a method of assigning an EST (expressed
CC sequence tag) to a particular chromosome. ESTs are markers for human
CC genes actually transcribed in vivo. Unlike the random genomic DNA
CC sequence tagged sites (STSs), ESTs point directly to expressed genes. The
CC use of ESTs could facilitate the tagging of most expressed human genes
CC within a few years at a fraction of the cost of complete genomic
CC sequencing. Using these primers and disclosed methods sublocalisation can
CC be achieved with panels of fragments from specific chromosomes or pools
CC of large genomic clones in an analogous manner. This PCR primer sequence
CC was designed from EST00034 by the computer program INTRON (National
CC Institutes of Mental Health, Bethesda, MD) to minimise the chance of
CC amplifying through an intron using the assumptions that: 1) introns are
CC genomic sequences that interrupt the coding and non-coding sequences of
CC genes. 2) there are consensus sequences for splice junctions. 3) 90% of
CC the human genes studied have 3' UTR of mRNA not interrupted by introns in
CC the genomic DNA. This PCR primer localised EST00034 to chromosome 16.
CC (Updated on 25-MAR-2003 to correct PN field.)
XX
XX Sequence 20 BP; 4 A; 1 C; 8 G; 7 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1752 TGGGTGAAGGGATACTTTT 1771
Db 1 TGTGTGAAGGGAGTCTTGT 20

Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

RESULT 1158
AAQ39547/c
ID AAQ39547 standard; DNA; 20 BP.
XX
AC AAQ39547;
```

```

XX 25-MAR-2003 (revised)
DT 20-MAY-1993 (first entry)
XX
DE PCR Primer #1 for mapping EST's to specific chromosome.
XX
KW expressed sequence tag; human genome project; chromosome;
KW human gene sequencing; PCR mapping; somatic cell hybrids;
KW sublocalisation; gene tagging; tissue typing.
XX
OS Synthetic.
XX
FN WO9300353-A1.
XX
PD 07-JAN-1993.
XX
PF 19-JUN-1992; 92WO-US005222.
XX
XX 20-JUN-1991; 91US-00716831.
PR 12-FEB-1992; 92US-00837195.
XX
PA (USSH ) US DEPT HEALTH & HUMAN SERVICE.
XX
XX Venter JC, Adams MD;
XX
DR WPI; 1993-036325/04.
XX
PT Particular expressed sequence tags from human CDNA - corresponds to
PT transcription prods. of genes, useful for tagging genes, mapping
PT chromosomes and tissue typing.
XX
PS Example 3; Page 42; 199pp; English.
XX
CC This PCR primer was used together with AAQ39548 for the PCR mapping of
CC somatic cell hybrids. This is a method of assigning an EST (expressed
CC sequence tag) to a particular chromosome. ESTs are markers for human
CC genes actually transcribed in vivo. Unlike the random genomic DNA
CC sequence tagged sites (STSs), ESTs point directly to expressed genes. The
CC use of ESTs could facilitate the tagging of most expressed human genes.
CC within a few years at a fraction of the cost of complete genomic
CC sequencing. Using these primers and disclosed methods sublocalisation can
CC be achieved with panels of fragments from specific chromosomes or pools
CC of large genomic clones in an analogous manner. This PCR primer sequence
CC was designed from EST00221 by the computer program INTRON (National
CC Institutes of Mental Health, Bethesda, MD) to minimise the chance of
CC amplifying through an intron using the assumptions that: 1) introns are
CC genomic sequences that interrupt the coding and non-coding sequences of
CC genes. 2) there are consensus sequences for splice junctions. 3) 90% of
CC the human genes studied have 3' UTR of mRNA not interrupted by introns in
CC the genomic DNA. This PCR primer localised EST00221 to chromosome 14.
CC (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1687 TCCAGGAGCCACCTTGGCCAC 1706
DB 20 TACATGAGCCATCTTGGCAC 1
RESULT 1159
AAQ74658
ID AAQ74658 standard; DNA; 20 BP.
XX
AC AAQ74658;
XX
XX 25-MAR-2003 (revised)
DT 07-JUN-1995 (first entry)
XX
DE Aspergillus aculeatus xylanase partial DNA.

```

```

XX Xylanase; Aspergillus aculeatus; brewing; paper pulp; food preparation;
KW plant cell wall degradation; ss.
XX
XX Aspergillus aculeatus.
OS
FN WO9421785-A1.
XX
PD 29-SEP-1994.
XX
XX 02-MAR-1994; 94WO-DK000088.
PF
XX 10-MAR-1993; 93DK-00000268.
PR 14-OCT-1993; 93DK-00001151.
XX
PA (NOVO ) NOVO-NORDISK AS.
XX
XX Kofod LV, Kauppinen MS, Christgau S, Heldt-Hansen HP, Dalboge H;
XX Andersen LN, Si JQ, Jacobsen TS, Munk N, Mullertz A;
XX WPI; 1994-317006/39.
XX
XX New xylanase enzymes from Aspergillus aculeatus - used for degrading
XX plant cell wall components, e.g. in the prepn. of feed, in baking and in
XX prepn. of pulp or paper.
XX
PS Claim 2; Page 58; 80pp; English.
XX
CC AAQ74642-Q74676 are partial Aspergillus aculeatus xylanase DNA sequences,
CC one or more of which can form part of a DNA sequence that encodes an
CC enzyme with xylanase activity. The xylanase enzyme degrades plant cell
CC wall components and reduces the viscosity of plant cell wall derived
CC material. These properties are useful in the production of dough and
CC baked products; in the preparation of feed, food, beer, wine, pulp and
CC paper; and for the separation of cereal components. It can also be used
CC in the production of antibodies. (Updated on 25-MAR-2003 to correct PN
CC field.) (Updated on 25-MAR-2003 to correct PI field.)
XX
SQ Sequence 20 BP; 5 A; 5 C; 3 G; 7 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1064 TTGAATACTTTGGACAGAT 1083
DB 1 TTCATACTTTGGACAGCT 20
RESULT 1160
AAQ97887
ID AAQ97887 standard; DNA; 20 BP.
XX
AC AAQ97887;
XX
XX 25-MAR-2003 (revised)
DT 17-OCT-1995 (first entry)
XX
XX PNA oligomer targeting 3' UTR region of PKC-alpha.
XX
XX Peptide nucleic acid; PNA; PKC-alpha; protein kinase C; ss;
KW cell proliferation; cell differentiation; isozyme; antisense;
KW triple helix; cancer; psoriasis; inflammation.
XX
OS Synthetic.
XX
XX Key Location/Qualifiers
FH misc_feature 1..20
FT /tag= a
FT subunits are composed of N-acetyl N-(2-aminoethyl)glycine
FT peptide residues, the nucleobase being attached
FT covalently to the acetyl group and the peptide linkage

```


PT study, diagnosis and therapy of cancers, partic. breast and ovarian
 PT cancer.
 XX

PS Example 10; Page 19; 123pp; English.
 XX

CC The primers given in AAQ76131-33 were used in RT-PCR to confirm that a 5'
 CC -terminal sequence obtained by 5'-RACE was linked, on mRNA, to the MDC
 CC cDNA sequence given in AAQ76121. (Updated on 25-MAR-2003 to correct PN
 CC field.)
 XX

SQ Sequence 20 BP; 2 A; 5 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1004 ATGAGACAGCTGTGGCCCTG 1023

||||| ||||| ||||| |||||

1 ATGAGGCTGCTGGCGGCTG 20

RESULT 1163

AAQ98519/C

ID AAQ98519 standard; DNA; 20 BP.

XX

AC AAQ98519;

XX

DT 19-APR-1996 (first entry)

XX

DE Chromosome 14 Alzheimer's disease marker EST00221 PCR primer.

XX

KW Alzheimer's disease; AD; marker; early onset; familial; detection;

XX

XX predisposition; primer; probe; diagnosis; ss.

OS Homo sapiens.

XX

PN US5449604-A.

XX

PD 12-SEP-1995.

XX

PF 21-OCT-1992; 92US-00964151.

XX

PR 21-OCT-1992; 92US-00964151.

XX

PA (UNIW) UNIV WASHINGTON.

XX

PI Wajsmann EM, Schellenberg GD, Bird TD;

XX

DR WPI; 1995-327691/42.

XX

PT Isolating chromosome 14 fragment indicative of familial Alzheimer's
 PT disease - by identifying genetic marker allele by pedigree analysis or
 PT measuring genetic linkage useful for early detection or predisposition.

XX

PS Disclosure; Col 19-20; 40pp; English.

XX

CC Isolation of chromosome 14 fragments indicative of familial Alzheimer's
 CC disease (AD) by identifying various genetic marker alleles using the PCR
 CC primers/probes (AAQ98507-Q98528) or measuring genetic linkage. The method
 CC is useful for the early diagnosis of chromosome 14 related early onset of
 CC AD and for the identification of a subject at risk of developing the
 CC disease. The method is esp. useful for identifying pre-symptomatic and
 CC pre-natal subjects at risk

XX

SQ Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1687 TCCAGGAGCCACTTGCCAC 1706

||||| ||||| ||||| |||||

20 TACATGAGCCATCTTGGCAC 1

Db

RESULT 1164

AAQ75602

ID AAQ75602 standard; DNA; 20 BP.

XX

AC AAQ75602;

XX

DT 04-AUG-1995 (first entry)

XX

DE Reverse transcription primer used in cDNA analysis technique.

XX

KW Analysis; gene expression; reverse transcription; primer; cDNA;

XX

KW aggregate; restriction enzyme; ss.

XX

OS Synthetic.

XX

PN JF06303997-A.

XX

PD 01-NOV-1994.

XX

PF 16-APR-1993; 93JP-00112515.

XX

PR 16-APR-1993; 93JP-00112515.

XX

PA (NITE) NIPPON TELEGRAPH & TELEPHONE CORP.

XX

DR WPI; 1995-018287/03.

XX

PT Analysis of cDNA and gene expression - by amplification of mRNA followed
 PT by digestion with restriction enzymes.

XX

PS Disclosure; Page 5; 11pp; Japanese.

XX

CC A method for the analysis of cDNA comprises (a) preparing an aggregate of
 CC double-stranded cDNAs by using an aggregate of mRNAs and a plural type of
 CC labelled reverse transcription primers (GENESEQ files AAQ75547-Q75798)
 CC and using the aggregate of mRNAs as the template for each reverse
 CC transcription primer; (b) digesting each of the prepared aggregates of
 CC the double-stranded cDNAs with restriction enzyme and; (c)
 CC electrophoresing the digested aggregate of cDNAs in separate lanes. The
 CC method can be used to analyse gene expression rapidly and easily

XX

SQ Sequence 20 BP; 0 A; 2 C; 0 G; 18 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1575 TTTTATATTTTCTATTTCTC 1594

||||| ||||| ||||| |||||

1 TTTTATTTTCTTTTCTC 20

Db

RESULT 1165

AAAT41353

ID AAAT41353 standard; DNA; 20 BP.

XX

AC AAAT41353;

XX

DT 04-DEC-1996 (first entry)

XX

DE Human gene signature HUMGS01396-derived sense primer.

XX

KW Gene signature; messenger RNA; mRNA; relative abundance; frequency;
 KW human; cloning; mapping; non-biased library; diagnosis; detection;
 KW cell typing; abnormal cell function; primer; PCR; amplification;
 KW polymerase chain reaction; ss.

XX

OS Synthetic.

XX

PN WO9514772-A1.

XX


```

PD 01-JUN-1995.
XX
XX 11-NOV-1994; 94WO-JP001916.
XX
XX 12-NOV-1993; 93JP-00355504.
XX
XX (MATS/) MATSUBARA K.
XX (OKUB/) OKUBO K.
XX
PI Matsubara K, Okubo K;
XX
XX WPI; 1995-206931/27.
XX
XX Single-stranded DNA for identifying gene signatures - isolated from 3'-
XX directed human cDNA library that reflects relative abundance of corresp.
XX mRNA in specific human tissues.
XX
XX Example 7; Fig 10; 2245pp; Japanese.
XX
XX Primers T41001-T41382 are derived from novel human gene signature (GS)
XX sequences which did not match with sequences deposited in Genbank release
XX 76. The GS sequences (T19001-T26837) were obtained from 3'-directed cDNA
XX libraries prepared from various human tissues; synthesis of cDNA was
XX initiated from the 3'-end of mRNA by using poly(T) as the sole primer.
XX Each library is constructed so as to reflect accurately the relative
XX abundance of different mRNAs in the particular tissue from which it was
XX derived. The appearance frequency of a given GS in a cDNA library can be
XX determined (esp. using primers and probes derived from the GS sequences)
XX as a means of diagnosing abnormal cell function or for recognising
XX different cell types. The primers T41353-4 amplify clone pm2216 which
XX comprises the GS HUMGS001396 (T20396). This amplification reaction gave a
XX prod. indistinguishable from the same PCR using mouse or Chinese hamster
XX ovary DNA as a template
XX
XX Sequence 20 BP; 6 A; 5 C; 2 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 166 ATCCGCATGACATCATATTT 185
Db 1 ATCTGCATGACCTATAATCT 20
RESULT 1166
AAT41036
ID AAT41036 standard; DNA; 20 BP.
XX
XX AAT41036;
XX
XX 03-DEC-1996 (first entry)
XX
XX Human gene signature HUMGS01081-derived anti-sense primer.
XX
XX Gene signature; messenger RNA; mRNA; relative abundance; frequency;
XX human; cloning; mapping; non-biased library; diagnosis; detection;
XX cell typing; abnormal cell function; primer; PCR; amplification;
XX polymerase chain reaction; ss.
XX
XX Synthetic.
XX
XX WO9514772-A1.
XX
XX 01-JUN-1995.
XX
XX 11-NOV-1994; 94WO-JP001916.
XX
XX 12-NOV-1993; 93JP-00355504.
XX
XX (MATS/) MATSUBARA K.
XX (OKUB/) OKUBO K.
XX
XX Matsubara K, Okubo K;
XX
XX WPI; 1995-206931/27.
XX
XX Single-stranded DNA for identifying gene signatures - isolated from 3'-
XX directed human cDNA library that reflects relative abundance of corresp.
XX mRNA in specific human tissues.
XX
XX Example 7; Fig 9; 2245pp; Japanese.
XX
XX Primers T41001-T41382 are derived from novel human gene signature (GS)

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PI Matsubara K, Okubo K;
XX
XX WPI; 1995-206931/27.
XX
XX Single-stranded DNA for identifying gene signatures - isolated from 3'-
XX directed human cDNA library that reflects relative abundance of corresp.
XX mRNA in specific human tissues.
XX
XX Example 7; Fig 6; 2245pp; Japanese.
XX
XX Primers T41001-T41382 are derived from novel human gene signature (GS)
XX sequences which did not match with sequences deposited in Genbank release
XX 76. The GS sequences (T19001-T26837) were obtained from 3'-directed cDNA
XX libraries prepared from various human tissues; synthesis of cDNA was
XX initiated from the 3'-end of mRNA by using poly(T) as the sole primer.
XX Each library is constructed so as to reflect accurately the relative
XX abundance of different mRNAs in the particular tissue from which it was
XX derived. The appearance frequency of a given GS in a cDNA library can be
XX determined (esp. using primers and probes derived from the GS sequences)
XX as a means of diagnosing abnormal cell function or for recognising
XX different cell types. The primers T41035-6 amplify clone pm0931 which
XX comprises the GS HUMGS001081 (T20081), located on chromosome 2
XX
XX Sequence 20 BP; 7 A; 3 C; 2 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1105 TCCAATATGACATACAGAA 1124
Db 1 TTCAATATGTTTAAACAGTA 20
RESULT 1167
AAT41300/c
ID AAT41300 standard; DNA; 20 BP.
XX
XX AAT41300;
XX
XX 03-DEC-1996 (first entry)
XX
XX Human gene signature HUMGS00096-derived anti-sense primer.
XX
XX Gene signature; messenger RNA; mRNA; relative abundance; frequency;
XX human; cloning; mapping; non-biased library; diagnosis; detection;
XX cell typing; abnormal cell function; primer; PCR; amplification;
XX polymerase chain reaction; ss.
XX
XX Synthetic.
XX
XX WO9514772-A1.
XX
XX 01-JUN-1995.
XX
XX 11-NOV-1994; 94WO-JP001916.
XX
XX 12-NOV-1993; 93JP-00355504.
XX
XX (MATS/) MATSUBARA K.
XX (OKUB/) OKUBO K.
XX
XX Matsubara K, Okubo K;
XX
XX WPI; 1995-206931/27.
XX
XX Single-stranded DNA for identifying gene signatures - isolated from 3'-
XX directed human cDNA library that reflects relative abundance of corresp.
XX mRNA in specific human tissues.
XX
XX Example 7; Fig 9; 2245pp; Japanese.
XX
XX Primers T41001-T41382 are derived from novel human gene signature (GS)

```

CC sequences which did not match with sequences deposited in Genbank release
 CC 76. The GS sequences (T19001-T26837) were obtained from 3'-directed cDNA
 CC libraries prepared from various human tissues; synthesis of cDNA was
 CC initiated from the 3'-end of mRNA by using poly(T) as the sole primer.
 CC Each library is constructed so as to reflect accurately the relative
 CC abundance of different mRNAs in the particular tissue from which it was
 CC derived. The appearance frequency of a given GS in a cDNA library can be
 CC determined (esp. using primers and probes derived from the GS sequences)
 CC as a means of diagnosing abnormal cell function or for recognising
 CC different cell types. The primers T41299-300 amplify clone pm0964 which
 CC comprises the GS HUMGS000096 (T19096), located on chromosomes 17+C
 XX
 CC Sequence 20 BP; 1 A; 10 C; 0 G; 9 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1234 GAGGAGAGTGCGCATGAGGA 1253
 |||||
 DB 20 GAGGAGAGTGAAGGAAGA 1

RESULT 1169
 AAQ84172
 ID AAQ84172 standard; DNA; 20 BP.
 XX
 AC AAQ84172;
 XX
 DT 25-MAR-2003 (revised)
 DT 21-SEP-1995 (first entry)
 XX
 DE PKC-alpha 3' untranslated region antisense oligo, ISIS #3884.
 XX
 KW Antisense; protein kinase C; alpha; PKC; beta; gamma; eta; epsilon; zeta;
 KW modulation; expression; isozyme; hydriase; 5' UTR; human;
 KW 3' untranslated region; translation initiation site; detection;
 KW phosphorothioate linkage; 2'-O-methyl modification;
 KW 2'-O-propyl modification; ss.
 XX
 OS Synthetic.

XX WO9502069-A1.
 XX
 XX 19-JAN-1995.
 XX
 XX 08-JUL-1994; 94WO-US007770.
 XX
 XX 09-JUL-1993; 93US-00089996.
 XX 22-FEB-1994; 94US-00199779.
 XX
 XX (ISIS-) ISIS PHARM INC.
 XX
 XX Bennett CF, Boggs RT, Dean NM;
 XX
 XX WPI; 1995-066911/09.

PT Oligo:nucleotide(s) hybridisable with Protein Kinase C mRNA or gene -
 PT also novel PKC-alpha 3'-UTR sequence, useful for diagnosis and treatment
 PT of hyperproliferative disorders.

XX Claim 11; Page 22; 125pp; English.
 XX
 CC The sequences given in AAQ84159-80 are oligos which are antisense to the
 CC protein kinase C-alpha (PKC-alpha) cDNA. These antisense molecules may be
 CC used in modulating the expression of this particular isozyme of PKC.
 CC These oligos preferably hybridise with the 5'- or 3'- untranslated
 CC regions of the PKC gene, or the translation initiation site, or the
 CC coding region. These oligos may be used in the detection of the human PKC
 CC alpha gene and for treatment of animals which have conditions associated
 CC with PKC-alpha. These oligos may contain at least one phosphorothioate
 CC linkage and/or at least one of the nucleotides comprises a modification
 CC on the 2' position of the sugar, esp. a 2'-O-methyl or a 2'-O-propyl

CC modification. (Updated on 25-MAR-2003 to correct PN field.)
 XX
 SQ Sequence 20 BP; 9 A; 4 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1409 AAGAGAAGACCCAGAGGAG 1428
 |||||
 DB 1 AAGAGAGAGACCCCTGAACAG 20

RESULT 1169
 AAT11626
 ID AAT11626 standard; DNA; 20 BP.
 XX
 AC AAT11626;
 XX
 DT 10-JUL-1996 (first entry)
 XX
 DE Murine alpha-1,3-galactosyltransferase (6 to 25) antisense oligo.
 XX
 KW Antisense; murine; alpha-1,3-galactosyltransferase; xenograft;
 KW hyperacute rejection; cell surface antigen; carbohydrate epitope;
 KW transplantation; natural antibody mediated;
 KW galactosyl(alpha1-3)galactose epitope; ss.

XX Synthetic.
 OS
 XX WO9533828-A1.
 XX
 XX 14-DEC-1995.

XX 17-MAY-1995; 95WO-US0005973.
 XX
 XX 03-JUN-1994; 94US-00253782.

XX (DIAC-) DIACRIN INC.
 XX
 XX Edge A;

XX WPI; 1996-040233/04.
 XX
 XX Cells with altered expression of galactosyl(alpha1-3)galactose epitope on
 XX the cell surface - have reduced capacity to stimulate natural antibody-
 XX mediated hyper-acute rejection by the recipient, useful for xenogeneic
 XX transplantation.

XX Claim 42; Page 44; 68pp; English.

XX The present sequence is antisense to a coding or regulatory region of the
 CC murine alpha-1,3-galactosyltransferase (AGT) gene, a key enzyme in the
 CC prodn. of galactosyl(alpha1-3)galactose (GAG). GAG is a cell surface
 CC antigen carbohydrate epitope, which is bound by natural antibodies when a
 CC cell expressing the epitope is transplanted into a recipient. The
 CC antisense sequence, pref. contained in a recombinant expression vector,
 CC can be used to modify a target cell by inhibiting the expression of AGT,
 CC and therefore the prodn. of the GAG epitope. The modified cell improves
 CC the success of xenogeneic engraftment of nonprimate xenografts in
 CC (non)human primate recipients by inhibiting natural antibody mediated
 CC hyperacute rejection. Using modified cells is more efficient than
 CC previous procedures, e.g. the removal of natural antibodies from the
 CC recipient's circulation, and overcomes problems associated with the
 CC admin. of immunosuppressant drugs

XX Sequence 20 BP; 6 A; 2 C; 7 G; 5 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 810 GGAGATGTTCCAGCCTAGTG 829

DR WPI; 1997-202871/18.

XX DNA encoding human type 5 17-beta-hydroxy:steroid dehydrogenase - useful

PT for screening compounds which inhibits its activity, esp. for reducing

PT production of testosterone or 20-alpha-hydroxy:progesterone.

XX

PS Claim 17; Page 45; 69pp; English.

XX

CC Antisense oligonucleotides (AAT63440-69) are complementary to target

CC portions of the novel human type 5 17-beta-hydroxysteroid dehydrogenase

CC (Hsdase) gene (see also AAT63439). Specific antisense oligonucleotides

CC (AAT63440-49) in the coding region can be used to block type 5 17-beta-

CC Hsdase synthesis. Other antisense oligonucleotides (AAT63450-58) block the

CC splicing of the type 5 17-beta-Hsdase premessage, and others (AAT63459-69)

CC inhibit the promoter activity of type 5 17-beta-Hsdase. The antisense

CC oligonucleotides can be incorporated into vectors and used to transfect

CC cells, thus reducing expression of the type 5 17-beta- Hsdase gene and

CC prodn. of testosterone or 20-alpha- hydroxyprogesterone

XX

SQ Sequence 20 BP; 10 A; 3 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 2045 CTATTTTCATTTTGTGAGC 2064

DB 20 CTCTTTTCAGTTTGTCTAGC 1

RESULT 1173

AAT74937

ID AAT74937 standard; DNA; 20 BP.

XX

AC AAT74937;

XX

DT 07-JAN-1998 (first entry)

XX

DE 5' primer for lipoprotein lipase (LPL) exon 6 allele amplification.

XX

XX polymorphic; Human leukocyte antigen; HLA; DNA sequencing;

KW lipoprotein lipase; LPL; PCR; polymerase chain reaction; allele; ss.

KW

XX Synthetic.

OS

XX WO9723650-A2.

PN

XX 03-JUL-1997.

PD

XX

PF 19-DEC-1996; 96WO-US020202.

XX

XX 22-DEC-1995; 95US-00577858.

XX

XX (VISI-) VISIBLE GENETICS INC.

PA

XX Stevens JK, Dunn JM, Leushner J, Green RJ;

PI

XX WPI; 1997-351085/32.

DR

XX Identification of allele type of a known polymorphic genetic locus - used

PT particularly for human leukocyte antigen allele determination.

PT

XX Example 6; Page 26; 75pp; English.

PS

XX This 5'-PCR primer is used in a novel method for identification of allele

CC types (in this case exon 6 of the lipoprotein lipase (LPL)) of a known

CC polymorphic genetic locus in a sample. The allele type is identified by

CC first combining the sample with a sequencing reaction mixture containing

CC a polymerase, nucleoside feed stocks, one type of chain terminating

CC nucleoside and a sequencing primer under conditions suitable for template

CC dependent primer extension to form a number of oligonucleotide fragments

CC of differing lengths, which are then evaluated on a denaturing gel. This

CC determines the position of the type of base corresponding to the chain

CC terminating bases in the primer. However, this method differs from

CC standard sequencing procedures, instead of performing and evaluating four

CC concurrent reactions, the sample is concurrently combined with at most

CC three sequencing reaction mixtures containing different types of chain

CC terminating nucleosides. The method can be used for the evaluation of

CC polymorphic sites, and for determining the allelic type of a polymorphic

CC gene. The methods are particularly useful for determining the human

CC leukocyte antigen (HLA) allele present in a sample

XX

SQ Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 336 GCAGAGATTCAACGTTGGTG 355

DB 1 GCCGAGATCAACAATCTGGTG 20

RESULT 1174

AAV29376

ID AAV29376 standard; DNA; 20 BP.

XX

AC AAV29376;

XX

DT 31-JUL-1998 (first entry)

XX

DE Calcium ion channel alpha subunit cDNA amplifying reverse primer.

XX

KW Calcium ion channel alpha subunit; human; episodic ataxia type 2;

KW familial hemiplegic migraine; FHM; EA-2; treatment; diagnosis;

KW PCR primer; ss.

XX

OS Synthetic.

OS Homo sapiens.

XX

PN EP834561-A1.

XX

PD 08-APR-1998.

XX

PF 27-SEP-1996; 96EP-00202707.

XX

PR 27-SEP-1996; 96EP-00202707.

XX

PA (UYLB-) RIJKSUNIV LEIDEN.

XX

DR WPI; 1998-195461/18.

XX

PT New human nucleic acid associated with migraine and episodic ataxia type

PT 2 - useful for diagnosis and development of, e.g. familial hemiplegic

PT migraine and episodic ataxia type 2.

XX

PS Disclosure; Page 6; 157pp; English.

XX This primer is based on the human calcium ion channel alpha 1 subunit

CC cDNA sequence and is used for localisation and identification of a mouse

CC homologue. The channel is related to familial hemiplegic migraine (FHM)

CC and/or episodic ataxia type 2 (EA-2) and is derived from, related to or

CC associated with a gene present in humans on chromosome 19p13.1-13.2. It

CC can be used to localise or identify genes related to episodic

CC neurological disorders, specifically migraine, FHM or EA-2, but also

CC epilepsy. The isolated or a recombinant nucleic acid can also be used to

CC distinguish between alleles of the corresponding gene. Cells and animals

CC containing recombinant expression vectors comprising the nucleic acid can

CC be useful in study, development and treatment of migraine, FHM, EA-2 and

CC epilepsy. Proteins or peptides encoded by the nucleic acid and natural or

CC synthetic antibodies against the proteins can be used to diagnose FHM, EA

CC -2, migraine and other neurological conditions associated with cation

CC channel dysfunction

XX Sequence 20 BP; 8 A; 3 C; 7 G; 2 T; 0 U; 0 Other;

SQ

XX 2'-substituted oligonucleotide(s) specific for interleukin-1 receptor
PT receptor.
PT
PT
XX Example 5; Page 19; 63pp; English.
XX
XX This is a novel oligomer comprising 20 covalently linked nucleotides
CC which bind to the splice junction site/exon 1 of the interleukin-1
CC receptor (IL1R) mRNA. Expression of IL1R, in cells and tissues can be
CC modulated by compositions comprising oligomers which are able to
CC specifically hybridise with target areas of its encoding sequence. The
CC composition can be used for treatment of disease in humans caused by
CC excessive receptor expression, e.g. inflammation. When labelled they can
CC be used diagnostically to determine overexpression of IL1R, also to
CC determine localisation and distribution of this expression for research,
CC diagnostic or therapeutic purposes
XX
XX Sequence 20 BP; 3 A; 4 C; 10 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1090 CTCACATCAGTCCTTCCAA 1109
DB 20 CTCACGCGCGCTCCAA 1
RESULT 1180
AAV49105
ID AAV49105 standard; DNA; 20 BP.
XX
XX AAV49105;
XX
XX 15-OCT-1998 (first entry)
XX
XX rb gene antisense oligonucleotide rb-N-53.
XX
XX rb gene; antisense oligonucleotide; modulate; gene expression; ss.
XX
XX Synthetic.
XX Homo sapiens.
XX
XX EP856579-A1.
XX
XX 05-AUG-1998.
XX
XX 31-JAN-1997; 97EP-00101531.
XX
XX 31-JAN-1997; 97EP-00101531.
XX
XX (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.
XX
XX Schlingensiepen K, Brysch W;
XX
XX WPI; 1998-400910/35.
XX
XX Preparation of antisense oligo:nucleotide(s) which lack long runs of
PT consecutive guanosine or inosine - and have specific ratio of residues
PT able to form two or three hydrogen bonds, have greater activity and
PT reduced toxicity, used therapeutically or to modulate growth of cells in
PT culture.
XX
XX Example 7; Fig 9a; 286pp; English.
XX
XX AAV49008-236 represent antisense oligonucleotides directed against the rb
CC gene. Of these, only oligonucleotides AAV49008-52 resulted in effective
CC downregulation of negative growth control by rb, while oligonucleotides
CC AAV49052-236 had little effect. The oligonucleotides exemplify the
CC invention. The specification describes oligonucleotides that contain 8-30
CC nucleotides, which contain at most 8 nucleotides that can each form three
CC hydrogen bonds to cytosine, do not contain four consecutive nucleotides

CC able to form three H-bonds each to four consecutive cytosines; do not
CC contain two sequences of three consecutive nucleotides each able to form
CC three H-bonds to three consecutive cytosines, and the ratio between
CC residues able to form two H-bonds each (2R) or three such bonds (3R) is
CC given by 2R/3R = 0.33-0.72. The oligonucleotides are used to modulate
CC expression of genes, particularly the genes for p53, BrB-2, junB, JunD,
CC TGF-beta 1 or beta 2 to control proliferation of primary cell cultures
CC (e.g. bone marrow stem, liver or kidney cells, osteoclasts, osteoblasts
CC and/or keratinocytes). The oligonucleotides can also be used to analyse
CC function of proteins (by altering their expression or activity) and
CC therapeutically, e.g. in cases of cancer or (targeting TGF) for
CC stimulating the immune system
XX
XX Sequence 20 BP; 11 A; 1 C; 1 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1609 AAAATTATTAAATATATAAT 1628
DB 1 AAAATTTTGAATAAATCAT 20
RESULT 1181
AAV57624
ID AAV57624 standard; DNA; 20 BP.
XX
XX AAV57624;
XX
XX 27-NOV-1998 (first entry)
XX
XX Exon 11 of an ENaC subunit amplifying reverse primer A-12.
XX
XX Epithelial sodium channel; ENaC; mutation; pathological condition;
KW ion transport; water retention; blood pressure; metabolic acidosis;
KW chronic respiratory disease; inflammation; human; PCR primer; ss.
XX
XX Synthetic.
XX Homo sapiens.
XX
XX WO9840516-A1.
XX
XX 17-SEP-1998.
XX
XX 11-MAR-1998; 98WO-US004681.
XX
XX 11-MAR-1997; 97US-0040171P.
XX
XX (UYUA) UNIV YALE.
XX
XX Lifton RP, Chang SS, Rossier BC;
XX
XX WPI; 1998-506740/43.
XX
XX Determination of presence of mutation conferring pathological condition
PT mediated by altered ion transport - comprises analysing sample for
PT presence of mutation of potassium ion channel gene, ENaC, or in its
PT encoded protein.
XX
XX Example 1; Page 37; 56pp; English.
XX
XX Sequences shown in AAV57601 to AAV57686 represent primers used for the
CC PCR amplification of the exons of the different subunits of the human
CC epithelial sodium channel (ENaC) gene. This is used in the method of the
CC invention of determining the presence or absence of a mutation conferring
CC a pathological condition mediated by altered ion transport. The method
CC comprises analysing a nucleic acid sample, or protein sample, for the
CC presence of a mutation in the ENaC gene, or in its encoded protein. A
CC vector containing a nucleic acid encoding a human altered variant of the
CC ENaC protein can be used to transform host cells to produce an altered
CC variant of an ENaC protein. The protein can be used to identify agents
CC that effect ion transport. The agonists can be used to treat pathological

CC conditions resulting from abnormal ion transport, such as water
 CC retention, increased blood pressure, chronic respiratory and metabolic
 CC acidosis and inflammation

XX Sequence 20 BP; 5 A; 5 C; 9 G; 1 T; 0 U; 0 Other;
 SQ Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 630 CACGACCGGTCATGACTG 649
 |||||
 Db 1 CAGGACACAGCGGAGGACTG 20

RESULT 1182

AAV35514
 ID AAV35514 standard; DNA; 20 BP.

XX AC
 XX AAV35514;

DT 01-SEP-1998 (first entry)

DE Oligo ON14 targeted to human protein kinase C (PKC)-alpha isozyme.

XX Protein kinase C; PKC; target; hybridisation; human; liposome;
 KW sterically stabilised; neoplastic disorder; inflammatory disorder;
 KW hyperproliferative disorder; cancer; psoriasis; PKC-alpha; ss.

XX Synthetic.

OS Homo sapiens.

OS WO9809633-A2.

PN 12-MAR-1998.

PD 03-SEP-1997; 97WO-EP004796.

FF 04-SEP-1996; 96GB-00018376.

PR (NOVS) NOVARTIS AG.

XX Nicklin PL, Phillips JA, Love WG, Hamilton KO;

XX WPI; 1998-260955/23.

XX Oligo-nucleotide compositions for protein kinase C disorders - comprising
 PT sequence hybridisable to protein kinase C gene entrapped in sterically
 PT stabilised liposomes.

PS Claim 21; Page 6; 25pp; English.

XX This represents an oligonucleotide sequence that is specifically
 CC hybridisable with DNA or RNA derived from a protein kinase C (PKC) gene,
 CC entrapped in sterically stabilised liposomes. Compositions comprising
 CC such oligonucleotides can be used in the treatment of PKC disorders and
 CC for modulating the expression of PKC in cells. They can be used in the
 CC diagnosis and treatment of disorders associated with PKC, particularly
 CC neoplastic, inflammatory and hyperproliferative disorders such as cancer
 CC or psoriasis. The compositions retain high activity after prolonged
 CC circulation in the bloodstream and exhibit reduced accumulation of
 CC oligonucleotides in non-target organs such as the liver and kidney

XX Sequence 20 BP; 9 A; 4 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1409 AAGAGAAAGACCCAGAGGAG 1428

Db 1 AAGAGAGAGACCCCTGAACAG 20

RESULT 1183

AAV81313/c
 ID AAV81313 standard; DNA; 20 BP.

XX AC
 XX AAV81313;

DT 02-MAR-1999 (first entry)

XX Upstream P23H primer for wild type rod opsin gene.

XX Blood-retinal barrier dysfunction; autosomal dominant retinitis; ss;
 KW diabetic retinopathy; retinitis pigmentosa; macular degeneration; VEGF;
 KW gyrate atrophy; Norrie disease; choroideremia; con-rod dystrophy; eNOS;
 KW Bardet-Biedl disease; Charcot-Marie-Tooth disease; Refsum disease; iNOS;
 KW rod; opsin; nitric oxide; retinal cell; hammerhead; hairpin; ribozyme;
 KW PCR; primer; amplification.

XX Synthetic.

OS Mus sp.

XX WO9848009-A2.

PN 29-OCT-1998.

XX 21-APR-1998; 98WO-US007968.

XX 21-APR-1997; 97US-0044492P.

XX 09-MAY-1997; 97US-0046147P.

XX (UVFL) UNIV FLORIDA.

XX Lewin AS, Hauswirth WW, Drenser K;

XX WPI; 1998-583657/49.

XX Cleaving mutant rodopsin RNA using ribozymes - useful to treat retinal
 PT diseases such as autosomal dominant retinitis and diabetic retinopathy.

XX Example 4; Page 17; 44pp; English.

XX The invention relates to treating blood-retinal barrier dysfunction in
 CC autosomal dominant retinitis or diabetic retinopathy, including treating
 CC retinal degeneration such as retinitis pigmentosa types 1 and 2, macular
 CC degeneration, gyrate atrophy, Norrie disease, choroideremia, various con-
 CC rod dystrophies, Bardet-Biedl, Charcot-Marie-Tooth, and Refsum disease.
 CC The method comprises using a ribozyme to either cleave a mutant form of
 CC the mRNA encoding a rod opsin protein, especially the mutant P23H and
 CC S334Ter isoforms or by reducing the nitric oxide activity in a retinal
 CC cell by cleaving the mRNA encoding the proteins VEGF, eNOS, or iNOS.
 CC Primers AAV81311-V81313 were used to amplify the sequences and detect
 CC levels of expression of the wild type and P23H mutant isoforms of the
 CC mouse rod opsin genes after retinal cells were transformed with a
 CC construct encoding a ribozyme targeted to the mutant isoform. This
 CC sequence corresponds to the upstream primer used to amplify the wild type
 CC isoform

XX Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 104 ACTACGACGGGATGTGGA 123

Db 20 ACCACGCCCGTGATGTGGA 1

RESULT 1184

AAZ28210/c

ID AAZ28210 standard; DNA; 20 BP.

XX AC
 XX AAZ28210;


```

XX 20-DEC-1999 (first entry)
DT XX
DE XX
DE XX
XX Human LFA-3 PCR primer 1.
XX Lymphocyte function-associated antigen 3; LFA-3; CD58; antisense; cancer;
KW inflammation; immune response; immune disorder; allograft rejection;
KW Crohn's disease; graft versus host disease; autoimmune disorder; primer;
KW arthritis; hyperproliferative disorder; pathogenic infection; PCR; ss.
XX Synthetic.
OS Homo sapiens.
OS WO9947707-A1.
PN 23-SEP-1999.
PD 17-MAR-1999; 99WO-US005837.
PF 20-MAR-1998; 98US-00045106.
PR (ISIS-) ISIS PHARM INC.
PA (UYVA ) UNIV YALE.
PI Bennett CF, Condon TP, Flournoy SC, Pober JS, Ma W;
XX WPI; 1999-590980/50.
DR Antisense molecules useful for treating inflammatory disorders.
XX Example 4; Page 78; 116pp; English.
XX This sequence represents a human LFA-3 (lymphocyte function-associated
CC antigen) PCR primer 1, used with LFA-3 primer 2 (AA228211) to prepare a
CC probe to assay LFA-3 levels. This was in order to confirm that antisense
CC oligonucleotides (AA228195-228205) active against human LFA-3 expression
CC acted via an antisense mechanism. LFA-3 is involved in immune responses
CC and also in tumorigenesis and other disease states. Inhibitors of LFA-3
CC expression may provide a novel therapeutic class of immunosuppressive,
CC anti-inflammatory and/or anticancer agents. Antisense oligonucleotides
CC which specifically hybridise to nucleic acids encoding LFA-3 can modulate
CC or completely block LFA-3 expression. The antisense oligonucleotides may
CC be used to treat or prevent a condition associated with LFA-3 expression,
CC including an immune response such as inflammation, an inflammatory bowel
CC disorder, Crohn's disease, allograft rejection, graft versus host
CC disease, arthritis or an autoimmune disorder, a hyperproliferative
CC disorder, or a pathogenic infection. Unlike prior art LFA-3 monoclonal
CC antibodies (MAbs), the antisense oligonucleotides are small molecules
CC which will have easy access to an inflammatory site. In addition,
CC repeated treatment with MAbs provokes production of antibodies to the
CC MAbs, which does not occur with antisense molecules, and binding of the
CC MAbs to LFA-3 may mimic CD2 binding. Polypeptide fragments of LFA-3 are
CC often insoluble, have many of the drawbacks associated with MAbs, have
CC limited binding and thus effectiveness, and are more expensive to produce
CC than antisense oligonucleotides
XX Sequence 20 BP; 1 A; 7 C; 7 G; 5 T; 0 U; 0 Other;
SQ Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 441 GCAGCAGCGACGACGTCG 460
DB 20 GCAGCAGCGACGACGTCG 1
||||| | | | | | | | | |
RESULT 1185
AAZ18008
ID AAZ18008 standard; DNA; 20 BP.
XX AAZ18008;
AC AAZ18008;
XX

XX 11-OCT-1999 (first entry)
DT XX
DE XX
DE XX
XX Homeobox conserved region PAX specific primer.
XX Genetic proximity; gene expression; cell characterisation; homeobox gene;
KW genetic defect; reverse transcriptase polymerase chain reaction; RT-PCR;
KW kinase gene; protein phosphatase; P450; steroid receptor; cadherin;
KW primer; ss.
XX Synthetic.
OS Homo sapiens.
OS WO9934016-A2.
PN 08-JUL-1999.
PD 28-DEC-1998; 98WO-IL0000625.
PF 29-DEC-1997; 97IL-00122793.
PR 16-OCT-1998; 98IL-00126627.
XX (GENE-) GENENA LTD.
PA Wider B;
XX WPI; 1999-419113/35.
DR Identifying and characterizing cells by comparing the pattern of gene
XX expression in a selected gene family.
XX Claim 4; Page 37; 102pp; English.
XX The invention provides a new method for identifying and characterising
CC cells. The method for determining the genetic proximity of a first cell
CC and a second cell comprises: (a) obtaining the first cell and the second
CC cell; (b) determining in the first cell and the second cell the pattern
CC of expression of genes in a selected gene family; and (c) calculating a
CC proximity index using a specified formula. The methods can be used for
CC characterising cells, e.g. for determining the origin of a cell, its
CC genetic status, whether it carries a genetic defect, or whether it is
CC transformed. They can be used for detecting a selected genetic defect in
CC an individual, e.g. a fetus. They can also be used for determining the
CC effect of a selected treatment on a test cell. They can also be used for
CC obtaining cells capable of expressing an homeobox related desired
CC property. The method uses reverse transcriptase polymerase chain reaction
CC (RT-PCR) for determining the pattern of gene expression in a selected
CC gene family. Sequences AAZ17803-218342 represent primers that can be used
CC in the RT-PCR reactions to determine the pattern of gene expression. The
CC gene family can be selected from a set of homeobox genes, kinase genes,
CC protein phosphatase genes, P450 enzyme genes, steroid receptor
CC superfamily genes or cadherin superfamily genes
XX Sequence 20 BP; 3 A; 5 C; 5 G; 7 T; 0 U; 0 Other;
SQ Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1859 GCGTGGTCTTCAAGATCT 1878
DB 1 GCGTGGTCTTCAAGATCT 20
||||| | | | | | | | | |
RESULT 1186
AAZ56817
ID AAZ56817 standard; DNA; 20 BP.
XX AAZ56817;
AC AAZ56817;
XX 14-JUL-1999 (first entry)
DT XX
XX WO9922023 probe 53.
DE XX
XX

```

KW Microorganism; hybridisation; probe; identification; detection; bacteria;
 KW milk; water; automated; ss.

OS Synthetic.

XX WO9922023-A2.

XX PD 06-MAY-1999.

XX PF 29-OCT-1998; 98WO-EP006863.

XX PR 29-OCT-1997; 97DE-01047731.

XX PA (MIRA-) MIRA DIAGNOSTICA GMBH.

XX PI Leiser M, Epping B;

XX WPI; 1999-303024/25.

XX Identifying specific microorganisms present in a mixture.

XX PS Claim 1; Page 9; 19pp; German.

XX This invention describes the detection of specific microorganisms from
 CC various taxa, in a sample containing several different microorganisms by
 CC nucleic acid hybridization, using as probes, 62 specific oligonucleotides
 CC (represented in AAX56765-X56826) with at least one oligonucleotide being
 CC able to hybridize to each microorganism. The method is useful for
 CC detecting and identifying bacteria in milk and water. The method, which
 CC may be fully automated, allows simultaneous detection and unequivocal
 CC identification of bacteria from different taxa

XX SQ Sequence 20 BP; 5 A; 7 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1517 ACCTCTCCAGCTCGGCTTC 1536

DB 1 ACCAATCCATCTCTGGATTC 20

RESULT 1187

AAX22575

ID AAX22575 standard; DNA; 20 BP.

AC AAX22575;

XX 27-MAY-1999 (first entry)

XX Human protein kinase C antisense oligonucleotide #14.

XX Protein kinase C; PKC; human; antisense; primer; inhibitor; treatment;
 KW hyperproliferative condition; cancer; colorectal; breast; lung;
 KW brain; glioblastoma multiforme; skin; psoriasis; ss.

XX Synthetic.

XX Homo sapiens.

XX US5885970-A.

XX 23-MAR-1999.

XX PF 07-JUN-1995; 95US-00488177.

XX PR 16-MAR-1992; 92US-00852852.

XX PR 09-JUL-1993; 93US-00089996.

XX PA (ISIS-) ISIS PHARM INC.

XX Dean N, Bennett CF;

XX

DR WPI; 1999-228583/19.

XX New human protein kinase C antisense oligonucleotides - useful for
 PT treating PKC-related hyperproliferative conditions e.g. cancer and
 PT psoriasis.

XX PS Example 1; Col 12; 55pp; English.

XX This invention describes antisense oligonucleotides that specifically
 CC bind to human protein kinase C (PKC) mRNA. These oligonucleotides can be
 CC used to inhibit PKC mRNA and therefore be used to treat PKC-related
 CC hyperproliferative conditions, e.g. cancer, especially colorectal cancer,
 CC breast cancer, bladder cancer, lung cancer, or brain cancer (preferably
 CC glioblastoma multiforme). The products of the invention may also be used
 CC to treat skin cancer and psoriasis

XX SQ Sequence 20 BP; 9 A; 4 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1409 AAGAGAAAGACCCAGAGAG 1428

DB 1 AAGAGAGAGACCCCTGAACAG 20

RESULT 1188

AAX15611

ID AAX15611 standard; cDNA to mRNA; 20 BP.

XX AAX15611;

XX 07-MAY-1999 (first entry)

XX Fragment of upstream sequence of coding region for VEGF.

XX Vascular endothelial cell growth factor; VEGF; antisense oligonucleotide;
 KW solid tumor growth; anticancer agent; rheumatic arthritis;
 KW diabetic retinitis; ss.

XX Unidentified.

XX JPI1042091-A.

XX 16-FEB-1999.

XX 25-JUL-1997; 97JP-00213838.

XX 25-JUL-1997; 97JP-00213838.

XX (TOAG) TOA GOSSEI CHEM IND LTD.

XX WPI; 1999-197823/17.

XX An antisense nucleic acid compound against vascular endothelial cell
 PT growth factor (VEGF) - useful as an anticancer agent, and for treatment
 PT of rheumatic arthritis and diabetic retinitis.

XX Example 2; Page 12; 16pp; English.

XX The present sequence represents the a fragment of the upstream sequence
 CC of the coding region for vascular endothelial cell growth factor (VEGF).
 CC Antisense oligonucleotides targeted to this region inhibit at least 50 %
 CC of VEGF expression by the cell. The antisense oligonucleotides can
 CC inhibit the growth of solid tumor and are useful as anticancer agents and
 CC for treating rheumatic arthritis and diabetic retinitis

XX SQ Sequence 20 BP; 11 A; 0 C; 9 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

```

XX PN WO924566-A1.
XX PD 20-MAY-1999.
XX PF 02-NOV-1998; 98WO-EP006921.
XX PR 06-NOV-1997; 97EP-00119404.
XX PA (HOFF ) ROCHE DIAGNOSTICS GMBH.
XX PI Anichini A, Parmiani G, Sensi M, Traversari C;
XX WPI; 1999-327398/27.
XX DR Tumor-specific polypeptide antigen useful for diagnosis and immunization.
XX PT Claim 20; Page 42; 47pp; English.
XX PS This invention describes a novel tumour-specific polypeptide antigen,
XX CC which is coded partially by an intron of an exon-coded tumour antigen and
XX CC acts as a cytotoxic T-cell activator. The tumour-specific antigen can be
XX CC used for the measurement of proliferation of tumour-specific cytotoxic T-
XX CC cells by adding the tumour-specific antigen to a sample of body fluid of
XX CC a patient and measuring the release of cytokines as a measure of
XX CC proliferation. The peptide is useful for the tumour cell-specific
XX CC immunization of patients, and also for the diagnostic differentiation of
XX CC melanoma cells and normal melanocytes. The tumour-specific antigen is
XX CC also useful for the activation of cytotoxic T-cells from T precursor
XX CC cells in vivo or in vitro. The tumour-specific antigens are not expressed
XX CC on normal cells and are capable of specifically distinguishing tumour
XX CC from normal cells. AAX55465-X55473 are primers used in the method of the
XX CC invention
XX SQ Sequence 20 BP; 6 A; 4 C; 5 G; 5 T; 0 U; 0 Other;
XX Query Match 0.7%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1006 GAGACAGCTGTGCGCCCTGGA 1025
Db 1 GAGAAATCTATGCGCCCTGTA 20
|||||
|||||

RESULT 1191
AAX78537
ID AAX78537 standard; DNA; 20 BP.
XX AC AAX78537;
XX DT 03-SEP-1999 (first entry)
XX DE Human PKC-alpha oligonucleotide primer ISIS # 3884.
XX KW PKC; human; PKC-alpha; primer; protein kinase C; expression modulator;
XX KW PKC-beta type I; PKC-beta type II; PKC-gamma; PKC-eta; PKC-delta;
XX KW PKC-epsilon; PKC-zeta; anti-inflammatory; cytostatic;
XX KW antisense targeting; isozyme; growth control; hyperproliferative disease;
XX KW colon cancer; glioblastoma; bladder cancer; inflammatory condition;
XX KW psoriasis; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN US922686-A.
XX PD 13-JUL-1999.
XX PF 14-JUN-1996; 96US-00664336.
XX PR 16-MAR-1992; 92US-00852852.
XX PR 09-JUL-1993; 93US-00089996.

QY 1433 AAGAACTACCGAAGAGGAG 1452
Db 1 AAGAGAGAAGGAAGAGGAG 20
|||||
|||||

RESULT 1189
AAX15778/C
ID AAX15778 standard; cDNA to mRNA; 20 BP.
XX AC AAX15778;
XX DT 07-MAY-1999 (first entry)
XX DE Antisense oligonucleotide targeted to upstream sequence of VEGF.
XX KW Vascular endothelial cell growth factor; VEGF; antisense oligonucleotide;
XX KW solid tumor growth; anticancer agent; rheumatic arthritis;
XX KW diabetic retinitis; ss.
XX OS Synthetic.
XX PN JP11042091-A.
XX PD 16-FEB-1999.
XX PF 25-JUL-1997; 97JP-00213838.
XX PR 25-JUL-1997; 97JP-00213838.
XX PA (TOAG ) TOA GOSEI CHEM IND LTD.
XX WPI; 1999-197823/17.
XX PT An antisense nucleic acid compound against vascular endothelial cell
XX PT growth factor (VEGF) - useful as an anticancer agent, and for treatment
XX PT of rheumatic arthritis and diabetic retinitis.
XX PS Example 1; Page 7; 16pp; English.
XX CC AAX15764-81 represent antisense oligonucleotides targeted to the upstream
XX CC sequence of the coding region for vascular endothelial cell growth factor
XX CC (VEGF). Antisense oligonucleotides targeted to this region inhibit at
XX CC least 50 % of VEGF expression by the cell. The antisense oligonucleotides
XX CC can inhibit the growth of solid tumor and are useful as anticancer agents
XX CC and for treating rheumatic arthritis and diabetic retinitis
XX SQ Sequence 20 BP; 0 A; 9 C; 0 G; 11 T; 0 U; 0 Other;
XX Query Match 0.7%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1433 AAGAACTACCGAAGAGGAG 1452
Db 20 AAGAGAGAAGGAAGAGGAG 1
|||||
|||||

RESULT 1190
AAX55471
ID AAX55471 standard; DNA; 20 BP.
XX AC AAX55471;
XX DT 27-JUL-1999 (first entry)
XX DE TPR2 PCR primer PR2.
XX KW Antigenic; tumour-specific; diagnosis; immunisation; proliferation;
XX KW cytotoxic T-cell; activator; cytokine; melanoma cell; melanocyte;
XX KW activation; T precursor cell; PCR primer; ss.
XX OS Synthetic.

```

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XX PA (ISIS-) ISIS PHARM INC.
XX PI Dean N, Bennett CF;
XX XX WPI; 1999-404471/34.
XX PT Oligonucleotides targetted against nucleic acids encoding protein kinase
XX C.
XX PS Claim 1; Col 35-36; 56pp; English.
XX CC This invention describes novel oligonucleotides (AAx78524-X78644) having
XX CC up to 50 nucleotides hybridisable with, and able to modulate the
XX CC expression of, a nucleic acid encoding protein kinase C and its isoymes
XX CC alpha, beta type I, beta type II, gamma, eta, delta, epsilon and zeta.
XX CC The oligonucleotides of the invention have anti-inflammatory and
XX CC cytostatic activity and are used for antisense targeting to modulate the
XX CC expression of PKC or of a particular PKC isozyme or set of isozymes in
XX CC cells or tissues. The products of the invention also hybridise with
XX CC nucleic acids involved in the modulation of PKC expression, which is
XX CC known to be involved in growth control in hyperproliferative diseases e.g.
XX CC colon cancer, glioblastoma and bladder cancer as well as in inflammatory
XX CC conditions e.g. psoriasis. Due to their specificity the oligonucleotides
XX CC are able to overcome the problems of toxicity associated with previous
XX CC agents designed to modulate PKC expression
XX SQ Sequence 20 BP; 9 A; 4 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1409 AAGAGAAAGACCCGAGGAG 1428
Db | | | | | | | | | | | | | | | |
1 AAGAGAGAGACCCGAGGAG 20

RESULT 1192
AAZ03392
ID AAZ03392 standard; DNA; 20 BP.
XX AC AAZ03392;
XX DT 07-OCT-1999 (first entry)
XX DE PCR primer used to amplify an ORF of Chlamydia trachomatis.
XX KW Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
XX KW paratrachoma; inclusion conjunctivitis; genital disease; perihhepatitis;
XX KW nongonococcal urethritis; epididymitis; cervicitis; salpingitis; PCR primer;
XX KW bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.
XX OS Synthetic.
XX OS Chlamydia trachomatis.
XX PN WO9928475-A2.
XX PD 10-JUN-1999.
XX PF 27-NOV-1998; 98WO-IB001939.
XX PR 28-NOV-1997; 97FR-00015041.
XX PR 17-DEC-1997; 97FR-00016034.
XX PR 04-NOV-1998; 98US-0107077P.
XX PA (GEST ) GENSET.
XX PI Griffais R;
XX XX WPI; 1999-371125/31.
XX PF 27-NOV-1998; 98WO-IB001939.
XX PR 28-NOV-1997; 97FR-00015041.
XX PR 17-DEC-1997; 97FR-00016034.
XX PR 04-NOV-1998; 98US-0107077P.
XX PA (GEST ) GENSET.
XX PI Griffais R;
XX XX WPI; 1999-371125/31.
XX PF Genome sequence of Chlamydia trachomatis.
XX PS Disclosure; Page 1812; 1755pp; English.
XX CC PCR primers AAZ01426-Z06209 were used to amplify open reading frames
XX CC (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs
XX CC encode polypeptides (see AAY36754-Y37949) which can be used as vaccines
XX CC against Chlamydia trachomatis. Antisense and ribozyme sequences can also
XX CC be used to control growth of the microorganism. Chlamydia trachomatis is
XX CC responsible for a large number of diseases, e.g. eye diseases such as
XX CC conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion
XX CC conjunctivitis; genital diseases such as nongonococcal urethritis;
XX CC epididymitis, cervicitis, salpingitis, perihhepatitis, bartholinitis;
XX CC pneumopathy in breast feeding infants; and venereal lymphogranulomatosis.
XX CC The polypeptides of the invention may be of use in treating these
XX CC diseases
XX SQ Sequence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1314 GGAAGAGTTCTCCGATTCTG 1333
Db | | | | | | | | | | | | | | | |
1 GAAAGAGTTGCCCGCTTCTG 20

RESULT 1193
AAZ05942
ID AAZ05942 standard; DNA; 20 BP.
XX AC AAZ05942;
XX DT 07-OCT-1999 (first entry)
XX DE PCR primer used to amplify an ORF of Chlamydia trachomatis.
XX KW Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
XX KW paratrachoma; inclusion conjunctivitis; genital disease; perihhepatitis;
XX KW nongonococcal urethritis; epididymitis; cervicitis; salpingitis; PCR primer;
XX KW bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.
XX OS Synthetic.
XX OS Chlamydia trachomatis.
XX PN WO9928475-A2.
XX PD 10-JUN-1999.
XX PF 27-NOV-1998; 98WO-IB001939.
XX PR 28-NOV-1997; 97FR-00015041.
XX PR 17-DEC-1997; 97FR-00016034.
XX PR 04-NOV-1998; 98US-0107077P.
XX PA (GEST ) GENSET.
XX PI Griffais R;
XX XX WPI; 1999-371125/31.
XX PF Genome sequence of Chlamydia trachomatis.
XX PS Disclosure; Page 1812; 1755pp; English.
XX CC PCR primers AAZ01426-Z06209 were used to amplify open reading frames
XX CC (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs
XX CC encode polypeptides (see AAY36754-Y37949) which can be used as vaccines
XX CC against Chlamydia trachomatis. Antisense and ribozyme sequences can also
XX CC be used to control growth of the microorganism. Chlamydia trachomatis is
XX CC responsible for a large number of diseases, e.g. eye diseases such as
XX CC conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion
XX CC conjunctivitis; genital diseases such as nongonococcal urethritis,

```

CC epidymitis, cervicitis, salpingitis, perihepatitis, bartholinitis;
 CC pneumopathy in breast feeding infants; and venereal lymphogranulomatosis.
 CC The polypeptides of the invention may be of use in treating these
 CC diseases
 XX
 SQ Sequence 20 BP; 3 A; 11 C; 2 G; 4 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1692 GAGCACCTTGCCACCCATT 1711
 DB 1 GAGCCCCATTCCCCCATT 20
 RESULT 1194
 AAZ02529
 ID AAZ02529 standard; DNA; 20 BP.
 XX
 AC AAZ02529;
 DT 07-OCT-1999 (first entry)
 XX
 DE PCR primer used to amplify an ORF of Chlamydia trachomatis.
 XX
 KW Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
 KW paratrachoma; inclusion conjunctivitis; genital disease; perihepatitis;
 KW nongonococcal urethritis; epidymitis; cervicitis; salpingitis; PCR primer;
 KW bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.
 XX
 OS Synthetic.
 OS Chlamydia trachomatis.
 XX
 PN WO9928475-A2.
 XX
 PD 10-JUN-1999.
 XX
 PF 27-NOV-1998; 98WO-IB001939.
 PR 28-NOV-1997; 97FR-00015041.
 PR 17-DEC-1997; 97FR-00016034.
 PR 04-NOV-1998; 98US-0107077P.
 XX
 PA (GEST) GENSET.
 XX
 PI Griffais R;
 XX
 DR WPI; 1999-371125/31.
 XX
 PT Genome sequence of Chlamydia trachomatis.
 XX
 PS Disclosure; Page 1532; 1755pp; English.
 CC
 CC PCR primers AAZ01426-Z06209 were used to amplify open reading frames
 CC (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs
 CC encode polypeptides (see AAY36754-Y37949) which can be used as vaccines
 CC against Chlamydia trachomatis. Antisense and ribozyme sequences can also
 CC be used to control growth of the microorganism. Chlamydia trachomatis is
 CC responsible for a large number of diseases, e.g. eye diseases such as
 CC conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion
 CC conjunctivitis; genital diseases such as nongonococcal urethritis,
 CC epidymitis, cervicitis, salpingitis, perihepatitis, bartholinitis;
 CC pneumopathy in breast feeding infants; and venereal lymphogranulomatosis.
 CC The polypeptides of the invention may be of use in treating these
 CC diseases
 XX
 SQ Sequence 20 BP; 4 A; 5 C; 5 G; 6 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1692 GAGCACCTTGCCACCCATT 1711
 DB 1 GAGCCCCATTCCCCCATT 20
 RESULT 1196
 AAZ18713
 ID AAZ18713 standard; DNA; 20 BP.
 XX
 AC AAZ18713;
 DT 07-OCT-1999 (first entry)
 XX
 DE PCR primer used to amplify an ORF of Chlamydia trachomatis.
 XX
 KW Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
 KW paratrachoma; inclusion conjunctivitis; genital disease; perihepatitis;
 KW nongonococcal urethritis; epidymitis; cervicitis; salpingitis; PCR primer;
 KW bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.
 XX
 OS Synthetic.
 OS Chlamydia trachomatis.
 XX
 PN WO9928475-A2.
 XX
 PD 10-JUN-1999.
 XX
 PF 27-NOV-1998; 98WO-IB001939.
 PR 28-NOV-1997; 97FR-00015041.
 PR 17-DEC-1997; 97FR-00016034.
 PR 04-NOV-1998; 98US-0107077P.
 XX
 PA (GEST) GENSET.
 XX
 PI Griffais R;
 XX
 DR WPI; 1999-371125/31.
 XX
 PT Genome sequence of Chlamydia trachomatis.
 XX
 PS Disclosure; Page 1532; 1755pp; English.
 CC
 CC PCR primers AAZ01426-Z06209 were used to amplify open reading frames
 CC (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs
 CC encode polypeptides (see AAY36754-Y37949) which can be used as vaccines
 CC against Chlamydia trachomatis. Antisense and ribozyme sequences can also
 CC be used to control growth of the microorganism. Chlamydia trachomatis is
 CC responsible for a large number of diseases, e.g. eye diseases such as
 CC conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion
 CC conjunctivitis; genital diseases such as nongonococcal urethritis,
 CC epidymitis, cervicitis, salpingitis, perihepatitis, bartholinitis;
 CC pneumopathy in breast feeding infants; and venereal lymphogranulomatosis.
 CC The polypeptides of the invention may be of use in treating these
 CC diseases
 XX
 SQ Sequence 20 BP; 4 A; 5 C; 5 G; 6 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1203 AATGCGAGCGATTCCTGAGG 1222
 DB 1 AATTCGCGATTCCTGAGG 20
 RESULT 1195
 AAZ04534
 ID AAZ04534 standard; DNA; 20 BP.
 XX
 AC AAZ04534;
 DT 07-OCT-1999 (first entry)
 XX
 DE PCR primer used to amplify an ORF of Chlamydia trachomatis.
 XX
 KW Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
 KW paratrachoma; inclusion conjunctivitis; genital disease; perihepatitis;
 KW nongonococcal urethritis; epidymitis; cervicitis; salpingitis; PCR primer;
 KW bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.
 XX
 OS Synthetic.
 OS Chlamydia trachomatis.
 XX
 PN WO9928475-A2.
 XX
 PD 10-JUN-1999.
 XX
 PF 27-NOV-1998; 98WO-IB001939.
 PR 28-NOV-1997; 97FR-00015041.
 PR 17-DEC-1997; 97FR-00016034.
 PR 04-NOV-1998; 98US-0107077P.
 XX
 PA (GEST) GENSET.
 XX
 PI Griffais R;
 XX
 DR WPI; 1999-371125/31.
 XX
 PT Genome sequence of Chlamydia trachomatis.
 XX
 PS Disclosure; Page 1696; 1755pp; English.
 CC
 CC PCR primers AAZ01426-Z06209 were used to amplify open reading frames
 CC (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs
 CC encode polypeptides (see AAY36754-Y37949) which can be used as vaccines
 CC against Chlamydia trachomatis. Antisense and ribozyme sequences can also
 CC be used to control growth of the microorganism. Chlamydia trachomatis is
 CC responsible for a large number of diseases, e.g. eye diseases such as
 CC conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion
 CC conjunctivitis; genital diseases such as nongonococcal urethritis,
 CC epidymitis, cervicitis, salpingitis, perihepatitis, bartholinitis;
 CC pneumopathy in breast feeding infants; and venereal lymphogranulomatosis.
 CC The polypeptides of the invention may be of use in treating these
 CC diseases
 XX
 SQ Sequence 20 BP; 6 A; 7 C; 3 G; 4 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1893 GCTCCTTAAGTACATCAGC 1912
 DB 1 GCTCCCCAAGTATAATCAGC 20
 RESULT 1196
 AAZ18713
 ID AAZ18713 standard; DNA; 20 BP.
 XX
 AC AAZ18713;
 DT 07-OCT-1999 (first entry)
 XX
 DE PCR primer used to amplify an ORF of Chlamydia trachomatis.
 XX
 KW Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
 KW paratrachoma; inclusion conjunctivitis; genital disease; perihepatitis;
 KW nongonococcal urethritis; epidymitis; cervicitis; salpingitis; PCR primer;
 KW bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.
 XX
 OS Synthetic.
 OS Chlamydia trachomatis.
 XX
 PN WO9928475-A2.
 XX
 PD 10-JUN-1999.
 XX
 PF 27-NOV-1998; 98WO-IB001939.
 PR 28-NOV-1997; 97FR-00015041.
 PR 17-DEC-1997; 97FR-00016034.
 PR 04-NOV-1998; 98US-0107077P.
 XX
 PA (GEST) GENSET.
 XX
 PI Griffais R;
 XX
 DR WPI; 1999-371125/31.
 XX
 PT Genome sequence of Chlamydia trachomatis.
 XX
 PS Disclosure; Page 1696; 1755pp; English.
 CC
 CC PCR primers AAZ01426-Z06209 were used to amplify open reading frames
 CC (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs
 CC encode polypeptides (see AAY36754-Y37949) which can be used as vaccines
 CC against Chlamydia trachomatis. Antisense and ribozyme sequences can also
 CC be used to control growth of the microorganism. Chlamydia trachomatis is
 CC responsible for a large number of diseases, e.g. eye diseases such as
 CC conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion
 CC conjunctivitis; genital diseases such as nongonococcal urethritis,
 CC epidymitis, cervicitis, salpingitis, perihepatitis, bartholinitis;
 CC pneumopathy in breast feeding infants; and venereal lymphogranulomatosis.
 CC The polypeptides of the invention may be of use in treating these
 CC diseases
 XX
 SQ Sequence 20 BP; 6 A; 7 C; 3 G; 4 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;


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PF 01-SEP-1998; 98WO-US018084.
XX
PR 02-SEP-1997; 97US-00923771.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Chen D, Srivatsa GS;
XX
DR WPI; 1999-205198/17.
XX
XX
XX New compositions comprising sensor arrays made up of unique probe
PT oligonucleotides - useful for characterizing a sample of target deletion
PT oligonucleotides.
XX
PS Example 9; Page 158; 163pp; English.
XX
XX This invention describes a novel composition comprising a number of
CC sensor arrays, where each array comprises a unique probe oligonucleotide,
CC which is the reverse complement of part of a unique target
CC oligonucleotide present in a mixture of target deletion sequence
CC oligonucleotides. The compositions form a method for characterizing a
CC sample of target deletion oligonucleotides which are labelled and
CC hybridize with the probe oligonucleotides of the sensor arrays. Such
CC oligonucleotides and their targets are represented in AAX23548-X23709.
CC Oligonucleotides characterized by the method form pharmaceutical
CC compositions that are useful for modulating cellular adhesion or
CC proliferation, and being active against a eukaryotic pathogen, a human
CC retrovirus, a human immunodeficiency virus (HIV), or a non-human
CC retrovirus, including influenza virus, Epstein-Barr virus, Respiratory
CC Syncytial Virus or cytomegalovirus (CMV). The compositions enable
CC characterization of deletion sequence oligonucleotides having related,
CC but different nucleobase sequences, and quantification of different
CC species of deletion sequence ("target") oligonucleotides in a mixture.
CC Also, if the specificity of the oligonucleotide's nucleobase sequence for
CC its reverse complement is not modified, the method may be performed using
CC oligodeoxynucleotides
XX
SQ Sequence 20 BP; 3 A; 9 C; 3 G; 5 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
OY 1679 TGAGCTCTCCAGGACAC 1698
Db 1 TGTGCTCTCTCCAGGACAC 20
RESULT 1199
AAX96595
ID AAX96595 standard; DNA; 20 BP.
XX
AC AAX96595;
XX
XX 13-SEP-1999 (first entry)
DE PCR primer used to amplify an ORF of Chlamydia pneumoniae.
XX
XX Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
XX sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
XX neutralising epitope; PCR primer; ss.
XX
XX Synthetic.
XX Chlamydia pneumoniae.
OS Chlamydia pneumoniae.
XX
XX WO9927105-A2.
XX
XX 03-JUN-1999.
XX
XX 20-NOV-1998; 98WO-IB001890.
XX
XX 21-NOV-1997; 97FR-00014673.
XX
XX 04-NOV-1998; 98US-0107078P.
XX
XX (GEST ) GENSET.
XX
XX Griffais R;
XX
XX WPI; 1999-357842/30.
XX
XX Genome sequence of Chlamydia pneumoniae.
XX
XX Page 1853; Disclosure; 1912pp; English.
XX
XX AAX91991-X97517 represent PCR primers used to amplify open reading frames
XX and other nucleic acid sequences from the genome of Chlamydia pneumoniae
XX (see AAX91990). C. pneumoniae causes respiratory disease such as
XX pneumonia and bronchitis and is thought to be a contributing factor in
XX heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema
XX nodosum or pharyngitis. The polypeptides encoded by the open reading
XX frames of the C. pneumoniae genome (see AAX34584-AAX35879) can be used
XX in immunogenic compositions as vaccines. Vectors containing C. pneumoniae
XX nucleotide sequences can also be used as immunogenic compositions,
XX especially where the vector directs the expression of a neutralising
XX epitope of C. pneumoniae
XX
SQ Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
OY 1224 CGCCATCCCTGAGGAGAGTG 1243
Db 1 CTCATCACTAAGGAGAGAG 20
RESULT 1200
AAX96781/c
ID AAX96781 standard; DNA; 20 BP.
XX
AC AAX96781;
XX
XX 13-SEP-1999 (first entry)
DE PCR primer used to amplify an ORF of Chlamydia pneumoniae.
XX
XX Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
XX sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
XX neutralising epitope; PCR primer; ss.
XX
XX Synthetic.
XX Chlamydia pneumoniae.
OS Chlamydia pneumoniae.
XX
XX WO9927105-A2.
XX
XX 03-JUN-1999.
XX
XX 20-NOV-1998; 98WO-IB001890.
XX
XX 21-NOV-1997; 97FR-00014673.
XX
XX 04-NOV-1998; 98US-0107078P.
XX
XX (GEST ) GENSET.
XX
XX Griffais R;
XX
XX WPI; 1999-357842/30.
XX
XX Genome sequence of Chlamydia pneumoniae.
XX
XX Page 1853; Disclosure; 1912pp; English.
XX
XX AAX91991-X97517 represent PCR primers used to amplify open reading frames
XX and other nucleic acid sequences from the genome of Chlamydia pneumoniae
XX (see AAX91990). C. pneumoniae causes respiratory disease such as
XX

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CC pneumonia and bronchitis and is thought to be a contributing factor in
CC heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema
CC nodosum or pharyngitis. The polypeptides encoded by the open reading
CC frames of the C. pneumoniae genome (see AAY34584- AAY35879) can be used
CC in immunogenic compositions as vaccines. Vectors containing C. pneumoniae
CC nucleotide sequences can also be used as immunogenic compositions,
CC especially where the vector directs the expression of a neutralising
CC epitope of C. pneumoniae

XX Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 278 ACATTAAATCTTGGCTCC 297
DB 20 ACAGAACTCTTGGCTGC 1

RESULT 1201
AA396191/c
ID AA396191 standard; DNA; 20 BP.

XX AC AA396191;
XX 13-SEP-1999 (first entry)

DE PCR primer used to amplify an ORF of Chlamydia pneumoniae.

XX Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis;
KW sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
KW neutralising epitope; PCR primer; ss.

XX Synthetic.
OS Chlamydia pneumoniae.

XX WO9927105-A2.

XX 03-JUN-1999.

XX 20-NOV-1998; 98WO-IB001890.

XX 21-NOV-1997; 97FR-00014673.

XX 04-NOV-1998; 98US-0107078P.

XX (GIST) GENSET.

XX Griffais R;

XX WPI; 1999-357842/30.

XX Genome sequence of Chlamydia pneumoniae.

XX Page 1807; Disclosure; 1912pp; English.

XX AA391991-X97517 represent PCR primers used to amplify open reading frames
CC and other nucleic acid sequences from the genome of Chlamydia pneumoniae
CC (see AA391990). C. pneumoniae causes respiratory disease such as
CC pneumonia and bronchitis and is thought to be a contributing factor in
CC heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema
CC nodosum or pharyngitis. The polypeptides encoded by the open reading
CC frames of the C. pneumoniae genome (see AA34584- AAY35879) can be used
CC in immunogenic compositions as vaccines. Vectors containing C. pneumoniae
CC nucleotide sequences can also be used as immunogenic compositions,
CC especially where the vector directs the expression of a neutralising
CC epitope of C. pneumoniae

XX Sequence 20 BP; 5 A; 4 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 585 CATTGATATTCACCATGGT 604
DB 20 CTTGAAACTCACCAGGTG 1

RESULT 1202

AA3919140
ID AA3919140 standard; DNA; 20 BP.

XX AC AA3919140;

XX 20-MAR-2003 (revised)

DT 14-MAY-1999 (first entry)

XX Human PKC-alpha antisense oligonucleotide SEQ ID NO:14.

XX Human; PKC; protein kinase C; diagnosis; antisense oligonucleotide;
KW phosphorothioate linkage; hyperproliferative disease; cancer; psoriasis;
KW tumour; inhibition; ss.

XX Synthetic.

OS Homo sapiens.

XX US5882927-A.

XX 16-MAR-1999.

XX 07-JUN-1995; 95US-00478178.

XX 16-MAR-1992; 92US-00852852.

XX 09-JUL-1993; 93US-00089996.

XX (ISIS-) ISIS PHARM INC.

XX Dean N, Bennett CF;

XX WPI; 1999-214073/18.

XX New synthetic oligonucleotides inhibiting expression of protein kinase C
PT (PKC)-alpha - useful for treating and diagnosing conditions associated
PT with abnormal PKC expression.

XX Example 1; Col 13; 56pp; English.

XX The present invention specifically describes antisense oligonucleotides
CC of up to 50 nucleotides in length which specifically bind human protein
CC kinase C-alpha (PKC-alpha) mRNA. AA3919127 to AA3919247 represent antisense
CC oligonucleotides from the present invention which bind human PKC-alpha, -
CC beta, -gamma, -delta, -epsilon, -zeta and -eta. The antisense
CC oligonucleotides modulate the expression of the PKC gene (i.e. inhibit
CC the PKC gene). The antisense oligonucleotides can be used to diagnose
CC abnormal proliferative states in tissue or other samples from patients
CC suspected of having a hyperproliferative disease e.g. cancer or psoriasis.
CC The antisense oligonucleotides can be used to distinguish PKC-associated
CC tumours and to detect and diagnose PKC expression (through the use of 32P
CC labeled antisense oligonucleotides). Radio-labeled antisense
CC oligonucleotides can also be used to perform autoradiography of tissues
CC to determine the localization, distribution and quantitation of PKC
CC expression for research, diagnostic and therapeutic purposes. The use of
CC the antisense oligonucleotides eliminate the side effects associated with
CC prior art methods because it modulates the amount of PKC protein made
CC from the gene rather than inhibiting the enzyme itself. (Updated on 20-
CC MAR-2003 to correct PF field.)

XX Sequence 20 BP; 9 A; 4 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1409 AAGAGAAAGACCCAGAGGAG 1428
||||| ||||| ||


```

Db      1 AAGAGAGAGACCCCTGAACAG 20

RESULT 1203
AAZ27279
ID AAZ27279 standard; DNA; 20 BP.
XX
AC AAZ27279;
XX
DT 01-DEC-1999 (first entry)
XX
DE Human protein kinase C alpha antisense oligonucleotide #14.
XX
KW Human; protein kinase C; PKC; diagnosis; antisense oligonucleotide;
KW phosphorothioate; hybridisation; isozyme; target; inflammation;
KW hyperproliferative disorder; psoriasis; tumour; cancer; glioblastoma; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN US959096-A.
XX
PD 28-SEP-1999.
XX
PF 07-JUN-1995; 95US-00481066.
XX
PR 16-MAR-1992; 92US-00852852.
PR 09-JUL-1993; 93US-00089996.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Bennett CF, Dean N;
XX
XX WPI; 1999-561076/47.
XX
PT Antisense oligonucleotides useful for treatment of hyperproliferative and
PT inflammatory conditions including psoriasis, tumors and cancer.
XX
PS Example 1; Col 13; 56pp; English.
XX
XX The present invention describes antisense oligonucleotides up to 50
CC nucleotides in length which specifically bind mRNA encoding human protein
CC kinase C (PKC). AAZ27266 to AAZ27386 represent human PKC antisense
CC oligonucleotides used in the exemplification of the present invention.
CC The antisense oligonucleotides are useful for the treatment of diseases
CC associated with PKC expression, such as hyperproliferative and
CC inflammatory conditions including psoriasis, tumours and cancer
CC (glioblastoma, bladder, breast, colon and lung cancer)
XX
SQ Sequence 20 BP; 9 A; 4 C; 6 G; 1 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1409 AAGAGAAAGACCCAGAGAG 1428
Db      1 AAGAGAGAGACCCCTGAACAG 20

RESULT 1204
AAZ89080
ID AAZ89080 standard; DNA; 20 BP.
XX
AC AAZ89080;
XX
DT 01-JUN-2000 (first entry)
XX
DE Human nibrin PCR primer Ex8 F.
XX
KW Nibrin; human; DNA double strand break repair protein; diagnosis;
KW therapy; Nijmegen Breakage Syndrome; gene therapy; PCR primer; ss.
XX
XX Homo sapiens.
XX
PN WO200027874-A2.
XX
PD 18-MAY-2000.
XX
PF 04-NOV-1999; 99WO-US026205.
XX
PR 06-NOV-1998; 98US-0107502P.
PR 22-JUL-1999; 99US-00358755.
XX
PA (CEDA-) CEDARS SINAI MEDICAL CENT.
XX
PI Kawabata H, Koeffler HP;
XX
XX WPI; 2000-376490/32.
XX
XX Nucleic acid encoding a transferrin receptor-like protein designated
XX TFR2, useful as a tool for altering the iron uptake of specific cells,
XX identifying new ligands, and diagnosing and treating tumors.
XX
XX Homo sapiens.
XX
PN WO200027874-A2.
XX
PD 18-MAY-2000.
XX
PF 04-NOV-1999; 99WO-US026205.
XX
PR 06-NOV-1998; 98US-0107502P.
PR 22-JUL-1999; 99US-00358755.
XX
PA (CEDA-) CEDARS SINAI MEDICAL CENT.
XX
PI Kawabata H, Koeffler HP;
XX
XX WPI; 2000-376490/32.
XX
XX Nucleic acid encoding a transferrin receptor-like protein designated
XX TFR2, useful as a tool for altering the iron uptake of specific cells,
XX identifying new ligands, and diagnosing and treating tumors.
XX
XX Homo sapiens.
XX
PN DE19818680-Cl.
XX
PD 09-MAR-2000.
XX
PF 27-APR-1998; 98DE-01018680.
XX
PR 27-APR-1998; 98DE-01018680.
XX
PA (UYBE ) UNIV BERLIN HUMBOLDT.
XX
DR WPI; 2000-196117/18.
XX
XX A DNA double strand break repair protein, Nibrin, and related DNA useful
XX for diagnosis and therapy of Nijmegen Breakage Syndrome and other
XX diseases influenced by DNA-double-strand break repair.
XX
XX Claim 5; Fig 3B; 32pp; German.
XX
XX This invention describes a novel DNA double strand break repair protein,
XX Nibrin. Nibrin and DNA encoding it are useful for diagnosis and/or
XX therapy of diseases influenced by repair of DNA-double strand breaks, in
XX particular Nijmegen Breakage Syndrome. The product of the invention has
XX applications in gene therapy. AAZ89048-289103 represent PCR primers used
XX in the amplification of the human nibrin protein described in the
XX invention
XX
SQ Sequence 20 BP; 4 A; 3 C; 5 G; 8 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 567 GAGGTCCTGTACATTGACA 586
Db      1 GAGGTCCTGTATCTTGACA 20

RESULT 1205
AAAZ27444
ID AAAZ27444 standard; DNA; 20 BP.
XX
AC AAAZ27444;
XX
DT 15-AUG-2000 (first entry)
XX
DE Transferrin receptor-like (TFR2) primer D.
XX
KW Transferrin receptor-like protein; Tfr2; chromosome 7q22;
KW myelodysplastic syndrome; acute myeloid leukaemia; breast cancer;
XX ovarian cancer; pancreatic cancer; iron uptake; RT-PCR primer; ss.
XX
XX Homo sapiens.
XX
PN WO200027874-A2.
XX
PD 18-MAY-2000.
XX
PF 04-NOV-1999; 99WO-US026205.
XX
PR 06-NOV-1998; 98US-0107502P.
PR 22-JUL-1999; 99US-00358755.
XX
PA (CEDA-) CEDARS SINAI MEDICAL CENT.
XX
PI Kawabata H, Koeffler HP;
XX
XX WPI; 2000-376490/32.
XX
XX Nucleic acid encoding a transferrin receptor-like protein designated
XX TFR2, useful as a tool for altering the iron uptake of specific cells,
XX identifying new ligands, and diagnosing and treating tumors.
XX
XX Homo sapiens.
XX
PN DE19818680-Cl.
XX
PD 09-MAR-2000.
XX
PF 27-APR-1998; 98DE-01018680.
XX
PR 27-APR-1998; 98DE-01018680.
XX
PA (UYBE ) UNIV BERLIN HUMBOLDT.
XX
DR WPI; 2000-196117/18.
XX
XX A DNA double strand break repair protein, Nibrin, and related DNA useful
XX for diagnosis and therapy of Nijmegen Breakage Syndrome and other
XX diseases influenced by DNA-double-strand break repair.
XX
XX Claim 5; Fig 3B; 32pp; German.
XX
XX This invention describes a novel DNA double strand break repair protein,
XX Nibrin. Nibrin and DNA encoding it are useful for diagnosis and/or
XX therapy of diseases influenced by repair of DNA-double strand breaks, in
XX particular Nijmegen Breakage Syndrome. The product of the invention has
XX applications in gene therapy. AAZ89048-289103 represent PCR primers used
XX in the amplification of the human nibrin protein described in the
XX invention
XX
SQ Sequence 20 BP; 4 A; 3 C; 5 G; 8 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 567 GAGGTCCTGTACATTGACA 586
Db      1 GAGGTCCTGTATCTTGACA 20

```

XX PS Example 1; Page 18; 58pp; English.

CC The transferrin receptor-like protein, Tfr2 functions in cellular iron uptake and is localised to chromosome 7q22. Two transcripts are expressed from the Tfr2 gene: alpha and beta. Tfr2-alpha is predicted to be a membrane bound form of Tfr2, while the beta form is predicted to be an intracellular form, since it lacks the putative transmembrane domain of Tfr2-alpha. Loss of heterozygosity or deletion at the Tfr2 locus has been reported in several malignant diseases including myelodysplastic syndromes, acute myeloid leukaemia, breast cancer, ovarian cancer and pancreatic cancer. It is speculated that Tfr2 mutations may occur in these cancers. It is known that Tfr2 expression is higher in tumour cells compared to normal cells. The Tfr2 gene may be used to alter iron uptake by specific cells and may be used for diagnosing or treating tumour cells. The present sequence is a RT-PCR primer for Tfr2-alpha, and was used to obtain a full-length cDNA clone

XX SQ Sequence 20 BP; 5 A; 2 C; 8 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1483 GGGGTCAAGGAGGAGTCAA 1502
||||| ||||| |||||

Db 1 GTGGTCAGTGAGGATGTCAA 20

RESULT 1206
AAZ61192
ID AAZ61192 standard; DNA; 20 BP.

XX AC AAZ61192;

XX DT 30-MAY-2000 (first entry)

XX DE PCR primer used to amplify anion transporter Atnov3 cDNA fragment.

XX KW Human; anion transporter protein; Atnov; Atnov; gene therapy;
anion transporter defect; liver disorder; drug screening; PCR primer; ss.

XX OS Homo sapiens.

XX PN WO200008157-A2.

XX PD 17-FEB-2000.

XX PF 06-AUG-1999; 99WO-US017823.

XX PR 07-AUG-1998; 98US-0095835P.

XX PA (AXYS-) AXYS PHARM INC.

XX PI Laubert B, Cardoso G, Hu P, Miller AP, Buckler AJ;

XX DR WPI; 2000-195575/17.

XX PT New isolated human anion transporter, Atnov, genes useful for developing products for the study, detection, prevention and treatment of anion transporter defects, particularly in liver disorders.

XX PS Example 1; Page 25; 53pp; English.

XX CC PCR primers AAZ61191-92 were used to amplify cDNA encoding a human anion transporter protein designated Atnov3. The Atnov nucleic acids can be used for identifying homologous or related genes, in producing compositions that modulate the expression or function of its encoded proteins, for gene therapy, mapping functional regions of the proteins, and in studying associated physiological pathways. In addition, modulation of the gene activity in vivo is used for prophylactic and therapeutic purposes, e.g. treatment of anion transporter defects, or identification of cell type based on expression. The products can be used

CC for treating liver disorders. The products can also be used for detection, diagnosis and drug screening

XX SQ Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1086 CAGCTCCACATCAGTCCTT 1105
||||| ||||| |||||

Db 1 CAAGCTAGACTTCAGGCCTT 20

RESULT 1207
AAZ35012
ID AAZ35012 standard; DNA; 20 BP.

XX AC AAZ35012;

XX DT 28-FEB-2000 (first entry)

XX DE Nijmegen breakage syndrome NBS1 gene primer Ex8 F.

XX KW NBS1 gene; nibrin; Nijmegen breakage syndrome; diagnosis; human;
gene therapy; cancer; microcephaly; mental retardation;
primary ovarian failure; PCR; primer; ss.

XX OS Synthetic.

XX OS Homo sapiens.

XX PN WO9955716-A1.

XX PD 04-NOV-1999.

XX PF 27-APR-1999; 99WO-US009036.

XX PR 27-APR-1998; 98US-0083269P.

XX PA (VIRG-) VIRGINIA MASON RES CENT.

XX PI Concannon PJ, Vissinga CS, Cerosaletti KM, Varon R, Sperling K;
Reis A;

XX DR WPI; 2000-062015/05.

XX PT Novel gene useful for detecting mutations or polymorphisms, and
diagnosing certain pathological conditions in Nijmegen Breakage syndrome patients.

XX PS Claim 20; Page 35; 58pp; English.

XX CC This primer, termed Ex8 F, flanks exon 8 of the human NBS1 gene (see
AAZ34997) that is associated with Nijmegen breakage syndrome (NBS). It is
CC 1 of 38 claimed exon-flanking primers (see AAZ34998-235035) designed for
the 16 exons of the NBS1 gene. The primers can be used to screen NBS
patients for mutations of the NBS1 gene, e.g. by PCR, and hence to
CC diagnose a predisposition to a pathological condition such as cancer,
microcephaly, mental retardation, and primary ovarian failure

XX SQ Sequence 20 BP; 4 A; 3 C; 5 G; 8 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 567 GAGGTCGTGTACATTGACA 586
||||| ||||| |||||

Db 1 GAGGTCGTGTATCTTGACA 20

RESULT 1208
AAAA0828

```

ID AAA40828 standard; DNA; 20 BP.
XX
AC AAA40828;
XX
DT 16-AUG-2000 (first entry)
XX
DE Human TNFalpha antisense oligonucleotide ISIS# 21688.
XX
KW Antisense oligonucleotide; phosphorothioate; TNFalpha; cytokine; inhibit;
KW tumour necrosis factor alpha; inflammatory bowel disease; diabetes;
KW rheumatoid arthritis; infectious disease; multiple sclerosis; hepatitis;
KW pancreatitis; atopic dermatitis; allograft rejection; autoimmune disease;
KW inflammatory disease; ss.
XX
OS Synthetic.
XX
PN WO200020645-A1.
XX
PD 13-APR-2000.
XX
PF 05-OCT-1999; 99WO-US023205.
XX
PR 05-OCT-1998; 98US-00166186.
PR 18-MAY-1999; 99US-00313932.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Bennett CF, Butler MM, Shanahan WJ;
XX
DR WPI; 2000-303808/26.
XX
PT Oligonucleotide for treating diseases associated with human tumor
PT necrosis factor-alpha (TNF-alpha) such as, diabetes and rheumatoid
PT arthritis, comprises nucleotide sequence complementary to intron of
PT nucleic acid encoding TNF-alpha.
XX
PS Claim 3; Page 57; 283pp; English.
XX
CC This sequence represents an antisense oligonucleotide sequence which
CC targets a region of the human tumour necrosis factor alpha (TNFalpha)
CC nucleotide sequence. TNFalpha is an important cytokine that plays a role
CC in host defence. It is produced mainly in macrophages and monocytes in
CC response to infection, invasion, injury or inflammation. Overexpression
CC of TNFalpha can result in disease states, particularly in infectious,
CC inflammatory and autoimmune diseases. The invention relates to antisense
CC oligonucleotides, such as that represented by the present sequence which
CC are capable of modulating the TNFalpha gene expression. The
CC oligonucleotides optionally have a phosphorothioate backbone, and may
CC also optionally contain at least one 2'-O-methoxyethyl modification. The
CC oligonucleotides are useful for modulating the expression of human
CC TNFalpha in cells and tissues, reducing a human cell inflammatory
CC response, reducing the blood glucose level in a human and treating a
CC human having a disease or condition associated with TNFalpha. Examples of
CC diseases associated with TNFalpha include diabetes, inflammatory bowel
CC disease, multiple sclerosis, pancreatitis, rheumatoid arthritis,
CC infectious disease, hepatitis, atopic dermatitis or allograft rejection.
CC The antisense oligonucleotides are also useful for modulating the
CC function of a selected nucleic acid sequence in adipose tissue
XX
SQ Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 845 GTGGCTCAGACTCCCTATCT 864
| | | | | | | | | |
Db 1 GTGGCCAGACACCTTATCT 20
RESULT 1209
AAA40912
ID AAA40912 standard; DNA; 20 BP.
XX
AC AAA40912;
XX
DT 16-AUG-2000 (first entry)
XX
DE Human TNFalpha antisense oligonucleotide ISIS# 100190.
XX
KW Antisense oligonucleotide; phosphorothioate; TNFalpha; cytokine; inhibit;
KW tumour necrosis factor alpha; inflammatory bowel disease; diabetes;
KW rheumatoid arthritis; infectious disease; multiple sclerosis; hepatitis;
KW pancreatitis; atopic dermatitis; allograft rejection; autoimmune disease;
KW inflammatory disease; ss.
XX
OS Synthetic.
XX
PN WO200020645-A1.
XX
PD 13-APR-2000.
XX
PF 05-OCT-1999; 99WO-US023205.
XX
PR 05-OCT-1998; 98US-00166186.
PR 18-MAY-1999; 99US-00313932.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Baker BF, Bennett CF, Butler MM, Shanahan WJ;
XX
DR WPI; 2000-303808/26.
XX
PT Oligonucleotide for treating diseases associated with human tumor
PT necrosis factor-alpha (TNF-alpha) such as, diabetes and rheumatoid
PT arthritis, comprises nucleotide sequence complementary to intron of
PT nucleic acid encoding TNF-alpha.
XX
PS Example 19; Page 90; 283pp; English.
XX
CC This sequence represents an antisense oligonucleotide sequence which
CC targets a region of the human tumour necrosis factor alpha (TNFalpha)
CC nucleotide sequence. TNFalpha is an important cytokine that plays a role
CC in host defence. It is produced mainly in macrophages and monocytes in
CC response to infection, invasion, injury or inflammation. Overexpression
CC of TNFalpha can result in disease states, particularly in infectious,
CC inflammatory and autoimmune diseases. The invention relates to antisense
CC oligonucleotides, such as that represented by the present sequence which
CC are capable of modulating the TNFalpha gene expression. The
CC oligonucleotides optionally have a phosphorothioate backbone, and may
CC also optionally contain at least one 2'-O-methoxyethyl modification. The
CC oligonucleotides are useful for modulating the expression of human
CC TNFalpha in cells and tissues, reducing a human cell inflammatory
CC response, reducing the blood glucose level in a human and treating a
CC human having a disease or condition associated with TNFalpha. Examples of
CC diseases associated with TNFalpha include diabetes, inflammatory bowel
CC disease, multiple sclerosis, pancreatitis, rheumatoid arthritis,
CC infectious disease, hepatitis, atopic dermatitis or allograft rejection.
CC The antisense oligonucleotides are also useful for modulating the
CC function of a selected nucleic acid sequence in adipose tissue
XX
SQ Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 844 TGTGGCTCAGACTCCCTATC 863
| | | | | | | | | |
Db 1 TGTGGCCAGACACCTTATC 20
RESULT 1210
AAA41252/c
ID AAA41252 standard; DNA; 20 BP.
XX
```



```

DT 20-JUN-2000 (first entry)
DE PCR primer #5 used in GS vector construction.
XX
KW PCR primer; drosophila; GS vector; gene searching; gene detection; ss.
XX
OS Synthetic.
XX
PN JP2000032986-A.
XX
PD 02-FEB-2000.
XX
PF 15-JUL-1998; 98JP-00200888.
XX
PR 15-JUL-1998; 98JP-00200888.
XX
PA (KAGA-) KAGAKU GIJUTSU SHINKO JIGYODAN.
XX
XX WPI; 2000-285513/25.
XX
PT A vector for gene searching - used in a method for gene detection.
XX
PS Example 2; Page 5; 10pp; Japanese.
XX
CC This sequence represents a PCR primer used in the construction of a GS
CC vector of the invention. The invention relates to a vector which can be
CC used for gene searching. The vector includes 2 pairs of manifestation
CC controlling sequences inserted into a Drosophila P element. The
CC factor target sequence derived from yeast and a GAL4 transcription
CC sequences are inserted in the P element in opposite orientations. The
CC vector can be used in methods for gene detection and gene searching. The
CC vector also allows for the effective search of new genes which control in
CC vivo functions of Drosophila
XX
SQ Sequence 20 BP; 7 A; 3 C; 7 G; 3 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1703 CCACCCATTCTCCCGTCT 1722
DB 20 CCGGAATTCCTCCAGTCT 1

RESULT 1213
AAZ93647/c
ID AAZ93647 standard; DNA; 20 BP.
XX
AC AAZ93647;
XX
DT 16-AUG-2000 (first entry)
XX
DE Antisense oligonucleotide directed against bcl-x gene.
XX
KW Bcl-x; bcl-xs; antisense; therapy; apoptosis; splice site;
KW cell signalling molecule; ultraviolet radiation; UV; cancer;
KW chemotherapy; cytokine; human; ss.
XX
OS Synthetic.
XX
PN WO200020432-A1.
XX
PD 13-APR-2000.
XX
PF 28-SEP-1999; 99WO-US022448.
XX
PR 07-OCT-1998; 98US-00167921.
PR 26-MAR-1999; 99US-00277020.
PR 02-JUN-1999; 99US-00323743.
XX
PA (ISIS-) ISIS PHARM INC.

Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1763 GATACCTTTATGCAACATA 1782
DB 20 GATACCTTTGTGGAACCTA 1

RESULT 1214
AAZ48645
ID AAZ48645 standard; DNA; 20 BP.
XX
AC AAZ48645;
XX
DT 07-MAR-2000 (first entry)
XX
DE TNF-alpha antisense inhibitor, ISIS-28089.
XX
KW Antisense inhibitor; oligonucleotide delivery agent; erythema multiforme;
KW expression modulator; cellular adhesion protein; malignant melanoma;
KW cellular proliferation modification; toxic epidermal necrolysis;
KW psoriasis; lichen planus; carcinoma; Paget's disease; Kaposi's sarcoma;
KW pulmonary fibrosis; Lyme disease; infection; therapy; TNF-alpha; ss.
XX
OS Synthetic.
XX
PN WO9960167-A1.
XX
PD 25-NOV-1999.
XX
PF 20-MAY-1999; 99WO-US011142.
XX
PR 21-MAY-1998; 98US-00082336.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Mehta R, Hardee GE, Cook PD, Ecker DJ, Tsai YJ, Templin MV;
XX
DR WPI; 2000-062467/05.
XX
PT New oligonucleotide compositions for topical delivery, used for the
PT delivery of bioactive agents for, e.g. modulating expression of a
PT cellular adhesion protein.

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XX
PI Bennett CF, Dean NM, Monia BP, Nickoloff BJ, Zhang Q;
XX
DR WPI; 2000-303730/26.
XX
PT Antisense oligonucleotides targeted to, and capable of inhibiting the
PT expression of, bcl-x nucleic acids, useful for sensitizing cancer cells
PT to apoptotic agents.
XX
XX Example 18; Page 108; 115pp; English.
XX
CC Antisense inhibition of bcl-x and bcl-xs expression results in apoptosis.
CC Antisense oligonucleotides directed against bcl-x alter the ratio of bcl-
CC x isoforms expressed by a cell or tissue (i.e. increases or decreases the
CC ratio of bcl-xl to bcl-xs expressed) by altering the splicing of the RNA
CC encoding bcl-x. The antisense oligonucleotide is specifically targeted to
CC a transcript comprising two splice sites which when contacted with the
CC transcript, reduces the relative frequency of splicing at the second
CC splice site so that the resulting ratio of RNA splice products is
CC altered. The use of antisense compounds sensitises cells to the effects
CC of apoptotic stimulants such as a cellular signaling molecule,
CC ultraviolet radiation, a cancer chemotherapeutic drug (e.g. VP-16,
CC cisplatinum or taxol), ceramide (e.g. staurosporine) or a cytokine which
CC causes mitochondrial dysfunction (especially loss of mitochondrial
CC membrane function). The antisense oligonucleotides may have a therapeutic
CC role in the treatment of cancer
XX
SQ Sequence 20 BP; 8 A; 4 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1763 GATACCTTTATGCAACATA 1782
DB 20 GATACCTTTGTGGAACCTA 1

RESULT 1214
AAZ48645
ID AAZ48645 standard; DNA; 20 BP.
XX
AC AAZ48645;
XX
DT 07-MAR-2000 (first entry)
XX
DE TNF-alpha antisense inhibitor, ISIS-28089.
XX
KW Antisense inhibitor; oligonucleotide delivery agent; erythema multiforme;
KW expression modulator; cellular adhesion protein; malignant melanoma;
KW cellular proliferation modification; toxic epidermal necrolysis;
KW psoriasis; lichen planus; carcinoma; Paget's disease; Kaposi's sarcoma;
KW pulmonary fibrosis; Lyme disease; infection; therapy; TNF-alpha; ss.
XX
OS Synthetic.
XX
PN WO9960167-A1.
XX
PD 25-NOV-1999.
XX
PF 20-MAY-1999; 99WO-US011142.
XX
PR 21-MAY-1998; 98US-00082336.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Mehta R, Hardee GE, Cook PD, Ecker DJ, Tsai YJ, Templin MV;
XX
DR WPI; 2000-062467/05.
XX
PT New oligonucleotide compositions for topical delivery, used for the
PT delivery of bioactive agents for, e.g. modulating expression of a
PT cellular adhesion protein.

```

XX PS Disclosure; Page 47; 94pp; English.

XX CC This sequence represents an antisense inhibitor of TNF-alpha. The

XX CC invention relates to a pharmaceutical composition comprising an

XX CC oligonucleotide (ON) admixed with a topical delivery agent. The

XX CC compositions can be used for the delivery of a ribozyme, an external

XX CC guide sequence, an antisense ON, an antisense peptide nucleic acid, an

XX CC aptamer or a molecular decoy. The ONs can be used to modulate expression

XX CC of a cellular adhesion protein or modulate a rate of cellular

XX CC proliferation. The compositions can also be used to treat psoriasis. They

XX CC can also be used to treat e.g. lichen planus, toxic epidermal necrolysis,

XX CC erythema multiforme, basal cell carcinoma, squamous cell carcinoma,

XX CC malignant melanoma, Paget's disease, Kaposi's sarcoma, pulmonary

XX CC fibrosis, Lyme disease and viral, fungal and bacterial infections of the

XX CC skin. They can be used to treat humans and primates, avians including

XX CC chickens and turkeys, domestic household, sport or farm animals including

XX CC rats, mice, rabbits and guinea pigs, fish, reptiles and zoo animals. The

XX CC compositions and methods may also be used to examine the function of

XX CC various proteins and genes in vitro in cultured or preserved dermal

XX CC tissues and in animals

XX SQ Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 845 GTGGCTCAGACTCCTATCT 864

DB 1 GTGTGCCAGACACCTATCT 20

RESULT 1215

AAAG0979/C

ID AAA09079 standard; DNA; 20 BP.

XX AC AAA09079;

XX DT 10-AUG-2000 (first entry)

XX DE Antisense phosphorothioate oligonucleotide against p21 gene.

XX KW antisense; phosphorothioate; p21; Akt; protein kinase B;

XX KW serine-threonine kinase; proto-oncogene; cardiant; inhibitor; apoptosis;

XX KW cell death; antiapoptotic; muscular active; ss.

XX OS Homo sapiens.

XX FH Key Location/Qualifiers

FT modified_base 1..20

FT /*tag= a

FT /*note= "phosphorothioate backbone"

XX PN WO200020025-A2.

XX PD 13-APR-2000.

XX PF 29-SEP-1999; 99WO-US022633.

XX PR 02-OCT-1998; 98US-0102740P.

XX PA (SELI-) ST ELIZABETH'S MEDICAL CENT INC.

XX PI Walsh K;

XX DR WPI; 2000-303639/26.

XX PT Treating myocardial infarction or conditions associated with increased

XX PT apoptotic cell-death of vascular endothelial cells or skeletal myocytes

XX PT comprises administering Akt (also termed Protein Kinase B (PKB))

XX PT molecule.

PS Example 1; Page 71; 71pp; English.

XX CC Antisense oligonucleotides to p21 inhibit cell cycle withdrawal during

XX CC myogenesis, and these cultures eventually undergo apoptosis at a high

XX CC frequency. Cell cultures infected with Adeno-Akt displayed significantly

XX CC less cell death than control cultures. Akt is effective in protecting

XX CC mitotic cells against death during the differentiation process. The

XX CC invention concerns methods of treating myocardial infarction, which

XX CC comprise administering to a subject an Akt (Protein Kinase B) molecule to

XX CC inhibit cardiac tissue necrosis. Akt is a proto-oncogene which encodes a

XX CC serine threonine kinase. It inhibits apoptotic cell death, in particular

XX CC of cardiomyocytes, skeletal myocytes and/or vascular endothelial cells.

XX CC It is therefore also useful for treating muscular dystrophy, spinal

XX CC muscular atrophy, anabolic steroid-induced muscle injury, skeletal muscle

XX CC oxidative stress, physical exercise and unloading-induced skeletal muscle

XX CC atrophy. The Akt protein can also be used in screening for an inhibitory

XX CC agent that inhibits apoptotic cell-death of cells

XX SQ Sequence 20 BP; 1 A; 7 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1251 GGACGAGACGACCCCTGACA 1270

DB 20 GGAGCGACGACCCCTGACA 1

RESULT 1216

AAZ76845

ID AAZ76845 standard; DNA; 20 BP.

XX AC AAZ76845;

XX DT 10-SEP-2001 (first entry)

XX DE Human biallelic marker downstream amplification primer SEQ ID NO:11201.

XX KW Human genome; biallelic marker; high density disequilibrium map;

XX KW genomic map; haplotype; phenotype; polymorphic base; genotyping;

XX KW haplotyping; hybridisation; identification; characterisation;

XX KW amplification; single nucleotide polymorphism; SNP; PCR primer;

XX KW diagnosis; ss.

XX OS Homo sapiens.

XX PN WO9954500-A2.

XX PD 28-OCT-1999.

XX PF 21-APR-1999; 99WO-IB000822.

XX PR 21-APR-1998; 98US-0082614P.

XX PR 23-NOV-1998; 98US-0109732P.

XX PA (GEST) GENSET.

XX PI Cohen D, Blumenfeld M, Chumakov I;

XX DR WPI; 2000-013267/01.

XX PT Novel biallelic markers used to construct a high density disequilibrium

XX PT map of the human genome.

XX PS Claim 9; Page 2618; 2745pp; English.

XX CC AAZ65654 to AAZ69578 represent human biallelic markers from the present

XX CC invention, which contain a polymorphic base at position 24 of their

XX CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification

XX CC primers for the biallelic markers. The biallelic markers of the invention

XX CC have a variety of uses: they can be used for high density mapping of the

XX CC human genome, and in complex association studies and haplotyping studies

CC which are useful in determining the genetic basis for disease states.
 CC Compositions and methods of the invention can also be useful for the
 CC identification of the targets for the development of pharmaceutical
 CC agents and diagnostic methods, as well as the characterisation of the
 CC differential efficacious responses to and side effects from
 CC pharmaceutical agents acting on a disease as well as other treatment.
 CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
 CC 3367, are not actually given a sequence in the Sequence Listing from the
 CC present invention
 CC
 XX Sequence 20 BP; 4 A; 2 C; 5 G; 9 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 390 CTCTCAGTGTCTTACTGGTG 409
 ||||| ||||| |||||
 Db 1 CTGTTAGTTTAAACTGGTG 20

RESULT 1217
 AAZ77040/C
 ID AAZ77040 standard; DNA; 20 BP.
 XX
 AC AAZ77040;
 XX
 DT 10-SEP-2001 (first entry)
 XX
 DE Human biallelic marker downstream amplification primer SEQ ID NO:11396.

XX Human genome; biallelic marker; high density disequilibrium map;
 KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
 KW haplotyping; hybridisation; identification; characterisation;
 KW amplification; single nucleotide polymorphism; SNP; PCR primer;
 KW diagnosis; ss.

XX Homo sapiens.
 XX WO9954500-A2.
 PN 28-OCT-1999.
 XX
 XX 21-APR-1999; 99WO-IB000822.
 XX
 XX 21-APR-1998; 98US-0082614P.
 PR 23-NOV-1998; 98US-0109732P.
 XX
 XX (GEST) GENSET.
 XX
 XX Cohen D, Blumenfeld M, Chumakov I;
 XX WPI; 2000-013267/01.
 DR Novel biallelic markers used to construct a high density disequilibrium
 PT map of the human genome.
 XX
 XX Claim 9; Page 2660; 2745pp; English.

XX AAZ65654 to AAZ69578 represent human biallelic markers from the present
 CC invention, which contain a polymorphic base at position 24 of their
 CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
 CC primers for the biallelic markers. The biallelic markers of the invention
 CC have a variety of uses: they can be used for high density mapping of the
 CC human genome, and in complex association studies and haplotyping studies
 CC which are useful in determining the genetic basis for disease states.
 CC Compositions and methods of the invention can also be useful for the
 CC identification of the targets for the development of pharmaceutical
 CC agents and diagnostic methods, as well as the characterisation of the
 CC differential efficacious responses to and side effects from
 CC pharmaceutical agents acting on a disease as well as other treatment.
 CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
 CC 3367, are not actually given a sequence in the Sequence Listing from the

CC present invention
 XX
 SQ Sequence 20 BP; 8 A; 2 C; 8 G; 2 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1519 CTCTCCAGCTCTGGCTTCCT 1538
 ||||| ||||| |||||
 Db 20 CTCTCCAGCTCTTGATTCCT 1

RESULT 1218
 AAZ72157
 ID AAZ72157 standard; DNA; 20 BP.

XX
 AC AAZ72157;
 XX
 DT 10-SEP-2001 (first entry)
 XX

DE Human biallelic marker upstream amplification primer SEQ ID NO:6513.
 XX
 KW Human genome; biallelic marker; high density disequilibrium map;
 KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
 KW haplotyping; hybridisation; identification; characterisation;
 KW amplification; single nucleotide polymorphism; SNP; PCR primer;
 KW diagnosis; ss.

XX Homo sapiens.
 XX WO9954500-A2.
 PN 28-OCT-1999.

XX
 XX 21-APR-1999; 99WO-IB000822.
 XX
 XX 21-APR-1998; 98US-0082614P.
 PR 23-NOV-1998; 98US-0109732P.

XX (GEST) GENSET.
 XX
 XX Cohen D, Blumenfeld M, Chumakov I;
 XX WPI; 2000-013267/01.

PT Novel biallelic markers used to construct a high density disequilibrium
 PT map of the human genome.

PS Claim 9; Page 1619; 2745pp; English.

XX AAZ65654 to AAZ69578 represent human biallelic markers from the present
 CC invention, which contain a polymorphic base at position 24 of their
 CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
 CC primers for the biallelic markers. The biallelic markers of the invention
 CC have a variety of uses: they can be used for high density mapping of the
 CC human genome, and in complex association studies and haplotyping studies
 CC which are useful in determining the genetic basis for disease states.
 CC Compositions and methods of the invention can also be useful for the
 CC identification of the targets for the development of pharmaceutical
 CC agents and diagnostic methods, as well as the characterisation of the
 CC differential efficacious responses to and side effects from
 CC pharmaceutical agents acting on a disease as well as other treatment.
 CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
 CC 3367, are not actually given a sequence in the Sequence Listing from the
 CC present invention

XX Sequence 20 BP; 4 A; 10 C; 1 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1088 AGTCCACATCAGTCCTTCC 1107
 Db 1 ATCTCCATCAGTCCTTCC 20

RESULT 1219
 AAZ76705/c
 ID AAZ76705 standard; DNA; 20 BP.
 XX
 XX AAZ76705;
 XX
 DT 10-SEP-2001 (first entry)
 XX
 DE Human biallelic marker downstream amplification primer SEQ ID NO:11061.
 XX
 KW Human genome; biallelic marker; high density disequilibrium map;
 KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
 KW haplotyping; hybridisation; identification; characterisation;
 KW amplification; single nucleotide polymorphism; SNP; PCR primer;
 KW diagnosis; ss.
 XX
 OS Homo sapiens.
 XX
 EN WO9954500-A2.
 XX
 PD 28-OCT-1999.
 XX
 PF 21-APR-1999; 99WO-IB000822.
 XX
 PR 21-APR-1999; 98US-0082614P.
 XX
 PR 23-NOV-1998; 98US-0109732P.
 XX
 PA (GEST) GENSET.
 XX
 PI Cohen D, Blumenfeld M, Chumakov I;
 XX
 DR WPI; 2000-0113267/01.
 XX
 PT Novel biallelic markers used to construct a high density disequilibrium
 PT map of the human genome.
 XX
 PS Claim 9; Page 2588; 2745pp; English.
 XX
 CC AAZ65654 to AAZ69578 represent human biallelic markers from the present
 CC invention, which contain a polymorphic base at position 24 of their
 CC nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
 CC primers for the biallelic markers. The biallelic markers of the invention
 CC have a variety of uses: they can be used for high density mapping of the
 CC human genome, and in complex association studies and haplotyping studies
 CC which are useful in determining the genetic basis for disease states.
 CC Compositions and methods of the invention can also be useful for the
 CC identification of the targets for the development of pharmaceutical
 CC agents and diagnostic methods, as well as the characterisation of the
 CC differential efficacious responses to and side effects from
 CC pharmaceutical agents acting on a disease as well as other treatment.
 CC N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
 CC 3367, are not actually given a sequence in the Sequence Listing from the
 CC present invention
 XX
 SQ Sequence 20 BP; 7 A; 3 C; 5 G; 5 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 579 CATTGACATTCAGTTTACC 598
 Db 20 CATTGACATTCAGTTTACC 1

RESULT 1220
 AAZ35096
 ID AAZ35096 standard; DNA; 20 BP.

XX AAZ35096;
 XX
 DT 13-MAR-2000 (first entry)
 XX
 DE Poliovirus receptor cDNA PCR primer pvr07.
 XX
 KW Poliovirus receptor; cellular virus entry protein; alphaherpesvirus;
 KW infection; human; therapy; PCR; primer; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 PN WO9963063-A1.
 XX
 PD 09-DEC-1999.
 XX
 PF 02-JUN-1999; 99WO-US012235.
 XX
 PR 03-JUN-1998; 98US-0087862P.
 XX
 PA (NOUN) UNIV NORTHWESTERN.
 PA (TYPE-) UNIV PENNSYLVANIA.
 XX
 PI Spear PG, Warner MS, Geraghty RG, Martinez WM, Montgomery RI;
 PI Cohen GH, Eisenberg RJ, Whitbeck CJ, Krummenacher C;
 XX
 DR WPI; 2000-097325/08.
 XX
 PT Novel proteins used to prevent viral infection and to identify other
 PT inhibitors.
 XX
 PS Example 2; Page 68; 144pp; English.
 XX
 CC Primer pvr07 was used in the PCR amplification of poliovirus receptor
 CC (Pvr) cDNA (alpha form) from a HeLa cDNA library. The product was used in
 CC constructs designed to examine alphaherpesvirus (aHV) entry into cells
 CC mediated by poliovirus receptor-related protein 1 (Prr1). The invention
 CC relates to cellular herpesvirus entry proteins (I), such as HveB and HveC
 CC (see AAY33389-90), that show homology to Prr2 and Prr1, their mutants,
 CC homologues, derivatives, variants and active fragments are claimed, as
 CC are recombinant cells, vectors, and anti-cellular herpesvirus protein
 CC compounds (II) such as antisense oligonucleotides, antibodies specific
 CC for (I), peptides and peptidomimetics. Methods of identifying (II), of
 CC inhibiting entry of an aHV into a cell using (II), and of treating an aHV
 CC infection in an animal, especially a human, using (II) are also claimed
 XX
 SQ Sequence 20 BP; 1 A; 8 C; 4 G; 7 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1971 CACTGCTGCGCCTCTGCTG 1990
 Db 1 CACCTTGTCGCTCTGCTG 20

RESULT 1221
 AAZ40370
 ID AAZ40370 standard; DNA; 20 BP.
 XX
 AC AAZ40370;
 XX
 DT 02-MAR-2000 (first entry)
 XX
 DE Antisense inhibitor of TNFalpha, ISIS-28089.
 XX
 KW Antisense oligonucleotide; inhibitor; pulmonary delivery composition;
 KW gene expression modulation; asthma; lung cancer; pulmonary fibrosis;
 KW rhinovirus; tuberculosis; bronchitis; pneumonia; pulmonary disorder;
 KW viral disease; obstructive lung disorder; pulmonary embolism; emphysema;
 KW anaphylaxis; chronic obstructive pulmonary disease; COPD; bronchiectasis;

KW chronic bronchitis; cystic fibrosis; therapy; TNFalpha; ss.
 XX Synthetic.
 OS WO9960010-A1.
 XX PN 25-NOV-1999.
 XX PD 20-MAY-1999; 99WO-US011214.
 XX PF 21-MAY-1998; 98US-00083585.
 XX PR (ISIS-) ISIS PHARM INC.
 XX PA Bennett CF, Ecker DJ, Cook PD;
 XX PI WPI; 2000-062437/05.
 XX DR Composition for pulmonary delivery useful for treating and diagnosing
 XX PT pulmonary diseases such as asthma, tuberculosis, etc.
 XX PS Claim 54; Page 33; 85pp; English.
 CC This sequence represents an antisense inhibitor of TNFalpha. The
 CC invention relates to a pharmaceutical composition (C) for pulmonary
 CC delivery of an oligonucleotide, comprising at least one oligonucleotide
 CC or its bioequivalent. (C) can be used to investigate the role of a gene
 CC or gene product in an animal other than human. (C) is also useful in a
 CC method of modulating the expression of a gene in an animal. (C) is useful
 CC in treating or diagnosing asthma, lung cancer, pulmonary fibrosis,
 CC rhinovirus, tuberculosis, bronchitis, pneumonia. The oligonucleotides are
 CC useful in determining the nature, function and potential relationship to
 CC body or disease status in animal of various genetic components of the
 CC body. (C) is useful for therapeutic, palliative or prophylactic treatment
 CC or to prevent the onset or recurrence of the diseases associated with
 CC pulmonary disorders. (C) is also useful in the treatment of diseases
 CC caused by viruses (such as respiratory syncytial virus, Hemophilus
 CC influenza, parainfluenza, etc.), obstructive lung disorders (such as
 CC pulmonary embolism or anaphylaxis), chronic obstructive pulmonary disease
 CC (COPD), emphysema, chronic bronchitis, bronchiectasis and cystic
 CC fibrosis. (C) administered through pulmonary delivery overcomes the
 CC complication and expenses associated with other routes of administration.
 CC Modified or substituted oligonucleotides have enhanced cellular uptake,
 CC target binding and increased stability in the presence of nucleases.
 CC Pulmonary administration of phosphodiester oligonucleotides lowers the
 CC level of nuclease activity in lung tissue to afford phosphodiester
 CC oligonucleotides longer lifetimes in lung tissue
 XX
 XX Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 845 GTGGCTCAGACTCCCTATCT 864
 Db 1 GTGTGCCAGACACCTATCT 20
 RESULT 1222
 AAZ47924
 ID AAZ47924 standard; DNA; 20 BP.
 XX AC AAZ47924;
 XX 10-MAR-2000 (first entry)
 DE TNF-alpha phosphorothioate antisense oligonucleotide ISIS 28089.
 XX Phosphorothioate; antisense oligonucleotide; pulmonary delivery; asthma;
 KW lung cancer; pulmonary fibrosis; cytostatic; antiasthmatic; antiviral;
 KW rhinovirus; tuberculosis; bronchitis; pneumonia; anaphylaxis;
 KW respiratory syncytial virus; parainfluenza; obstructive lung disorder;
 KW

KW pulmonary embolism; chronic obstructive pulmonary disease; COPD;
 KW emphysema; chronic bronchitis; bronchiectasis; cystic fibrosis; ss.
 XX Synthetic.
 OS Key Location/Qualifiers
 XX modified_base 1..20
 XX FT /*tag= a
 XX FT /note= "phosphorothioate linkages"
 XX WO9960166-A1.
 XX PN 25-NOV-1999.
 XX PD 20-MAY-1999; 99WO-US011141.
 XX PF 21-MAY-1998; 98US-00083586.
 XX PR (ISIS-) ISIS PHARM INC.
 XX PA Bennett CF, Ecker DJ, Cook PD;
 XX PI WPI; 2000-062466/05.
 XX DR New pharmaceutical composition useful for pulmonary delivery of
 XX PT oligonucleotide for treating asthma, lung cancer and pulmonary fibrosis.
 XX PS Claim 62; Page 34; 90pp; English.
 CC The present invention describes a pharmaceutical composition for
 CC pulmonary delivery of an oligonucleotide comprising at least one
 CC oligonucleotide where the sugar moiety of at least one nucleoside unit of
 CC the oligonucleotide is not a 2'-deoxyribofuranosyl sugar moiety or at
 CC least one internucleotide linkage within the oligonucleotide is not a
 CC phosphodiester or a phosphothioate linkage. The composition is useful for
 CC treating an animal having or suspected of having a disease or a disorder
 CC that is treatable with one or more nucleic acids e.g. asthma, a cancer of
 CC the lung, pulmonary fibrosis, rhinovirus, tuberculosis, bronchitis or
 CC pneumonia and other lung disorders e.g. respiratory syncytial virus, H.
 CC influenza, parainfluenza, obstructive lung disorders e.g. pulmonary
 CC embolism or anaphylaxis, chronic obstructive pulmonary disease (COPD),
 CC emphysema, chronic bronchitis, bronchiectasis and cystic fibrosis. The
 CC oligonucleotides are also useful for determining the nature, function and
 CC potential relationship to body or disease states in animals or various
 CC genetic components of the body. Pulmonary administration of an antisense
 CC oligonucleotide bypasses the complications and expense associated with
 CC intravenous and other routes of administration providing enhanced
 CC delivery of the oligonucleotides. The modified oligonucleotides have
 CC enhanced cellular uptake, enhanced binding to target and increased
 CC stability in the presence of nucleases. The present sequence represents
 CC an antisense oligonucleotide used in the exemplification of the present
 CC invention
 XX
 XX Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 845 GTGGCTCAGACTCCCTATCT 864
 Db 1 GTGTGCCAGACACCTATCT 20
 RESULT 1223
 AAA29828/c
 ID AAA29828 standard; DNA; 20 BP.
 XX AC AAA29828;
 XX 25-AUG-2000 (first entry)
 DE Human jun N-terminal kinase kinase-2 antisense oligonucleotide #13.

```

XX Human; jun N-terminal kinase kinase-2; JKK-2; modulation; tumour;
KW anti-inflammatory; cytostatic; anti-infectious; infection; inflammation;
KW detection; antisense therapy; phosphorothioate; ss.
XX Homo sapiens.
XX Key Location/Qualifiers
FH modified_base 1..20
FT /tag= a
FT /note= "Phosphorothioate linkages"
XX US6054440-A.
XX 25-APR-2000.
XX 24-JUN-1999; 99US-00344001.
XX 24-JUN-1999; 99US-00344001.
XX (ISIS-) ISIS PHARM INC.
XX Monia BP, Cowser LM;
XX WPI; 2000-338506/29.
XX Antisense compound specifically hybridizing and inhibiting the expression
PT of human Jun N-terminal kinase kinase-2 is useful for treating infection,
PT inflammation and tumor.
XX Claim 3; Col 40; 31pp; English.
XX The present invention describes an antisense compound (I) of 8-30
CC nucleobases, specifically hybridizing to, and inhibiting expression of,
CC human jun N-terminal kinase kinase-2 (JNK-2). Also described is a method
CC of inhibiting the expression of human JNK-2 in human cells or tissues,
CC comprising contacting the cells or tissues, with (I), in vitro. (I) has
CC anti-inflammatory, cytostatic and anti-infectious activities. (I) is useful
CC for inhibiting the expression of JNK-2 in human cells or tissues and
CC prevents or delays infection, inflammation or tumor formation associated
CC with altered expression of JNK-2. (I) is also useful for detecting the
CC levels of JNK-2 in a sample. The present sequence represents a
CC phosphorothioate antisense oligonucleotide for human JNK-2, from the
CC present invention
XX Sequence 20 BP; 2 A; 12 C; 3 G; 3 T; 0 U; 0 Other;
SQ Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 602 GTGACGGCGTGGAAGAGGCC 621
Db ||||| ||||| ||||| |||||
20 GTGCGCGCGGGAAGATGCC 1
RESULT 1224
AAZ48127
ID AAZ48127 standard; DNA; 20 BP.
XX AAZ48127;
AC AAZ48127;
XX 14-MAR-2000 (first entry)
DT TNF-alpha targeting antisense oligonucleotide ISIS-28089 SEQ ID NO:9.
DE Antisense oligonucleotide; phosphorothioate; inhibition; liposome;
XX long-circulating liposome; anticancer; anti-inflammatory; tumour;
KW inflammation; autoimmune disease; cytostatic; immunosuppressive;
KW gene therapy; ss.
XX Synthetic.
OS
XX

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FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= a
FT /note= "phosphorothioate linkages"
XX WO9959547-A1.
XX 25-NOV-1999.
XX 20-MAY-1999; 99WO-US011267.
XX 21-MAY-1998; 98US-00082365.
XX (ISIS-) ISIS PHARM INC.
XX Mehta R, Hardee GE, Leamon C;
XX WPI; 2000-072399/06.
XX New liposome compositions having long plasma half-lives, used for
PT delivering compounds for treating e.g. tumors, inflammation or autoimmune
PT diseases.
XX Disclosure; Page 34; 91pp; English.
XX The present invention describes a liposome (I) which has a plasma half-
CC life of at least 5 hours and comprises at most 10 mol % of a
CC phosphatidylglycerol (PG) compound that has a fatty acid portion of 10 to
CC 20 carbon atoms. The liposomes can be used to encapsulate a bioactive
CC agent, e.g. an anticancer agent, an anti-inflammatory agent, an
CC oligonucleotide (such as a hemimer, molecular decoy or an aptamer) or an
CC antisense compound (such as a ribozyme, an external guide sequence, a
CC compound comprising at most synthetic moiety which has nuclease activity,
CC an antisense peptide nucleic acid, an antisense nucleotide and/or
CC comprising a sequence that hybridises to a nucleotide sequence present in
CC a viral gene, ras gene or a gene encoding a cellular adhesion molecule).
CC Such liposomes can be used for: (1) preventing cancer or reducing the
CC rate of growth of a tumour or cancer in a mammal; (2) preventing or
CC reducing the severity of inflammation in a mammal (especially a human);
CC (3) modulating expression of a gene by contacting cells, tissues, organs
CC or organisms expressing the gene with the liposome; or (4) preventing,
CC reducing the rate of progression of or reducing the severity of symptoms
CC resulting from an autoimmune disease in a mammal. The liposomes have long
CC circulating half-life in mammalian plasma. AAZ48119 to AAZ48130 represent
CC antisense oligonucleotide sequences used in the exemplification of the
CC present invention
XX Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
SQ Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 845 GTGGCTCAGACTCCCTATCT 864
Db ||||| ||||| ||||| |||||
1 GTGTGCCAGACACCCCTATCT 20
RESULT 1225
AAZ48129
ID AAZ48129 standard; DNA; 20 BP.
XX AAZ48129;
AC AAZ48129;
XX 14-MAR-2000 (first entry)
DT HPV targeting antisense oligonucleotide ISIS-2105 SEQ ID NO:11.
DE Antisense oligonucleotide; phosphorothioate; inhibition; liposome;
XX long-circulating liposome; anticancer; anti-inflammatory; tumour;
KW inflammation; autoimmune disease; cytostatic; immunosuppressive;
KW gene therapy; ss.
XX

```

OS Synthetic.
 XX Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= a
 FT /note= "phosphorothioate linkages"
 XX
 PN WO9959547-A1.
 XX
 XX 25-NOV-1999.
 XX
 XX 20-MAY-1999; 99WO-US011267.
 XX
 XX 21-MAY-1998; 98US-00082365.
 XX
 XX (ISIS-) ISIS PHARM INC.
 XX
 XX Mehta R, Hardee GE, Leamon C;
 XX
 XX WPI; 2000-072399/06.
 DR
 XX
 XX New liposome compositions having long plasma half-lives, used for
 PT delivering compounds for treating e.g. tumors, inflammation or autoimmune
 PT diseases.
 XX
 XX Example 1; Page 34; 91pp; English.
 PS
 XX The present invention describes a liposome (1) which has a plasma half-
 CC life of at least 5 hours and comprises at most 10 mol % of a
 CC phosphatidylglycerol (PG) compound that has a fatty acid portion of 10 to
 CC 20 carbon atoms. The liposomes can be used to encapsulate a bioactive
 CC agent, e.g. an anticancer agent, an anti-inflammatory agent, an
 CC oligonucleotide (such as a hemimer, molecular decoy or an aptamer) or an
 CC antisense compound (such as a ribozyme, an external guide sequence, a
 CC compound comprising at most synthetic moiety which has nuclease activity,
 CC an antisense peptide nucleic acid, an antisense nucleotide and/or
 CC comprising a sequence that hybridises to a nucleotide sequence present in
 CC a viral gene, ras gene or a gene encoding a cellular adhesion molecule).
 CC Such liposomes can be used for: (1) preventing cancer or reducing the
 CC rate of growth of a tumour or cancer in a mammal; (2) preventing or
 CC reducing the severity of inflammation in a mammal (especially a human);
 CC (3) modulating expression of a gene by contacting cells, tissues, organs
 CC or organisms expressing the gene with the liposome; or (4) preventing,
 CC reducing the rate of progression of or reducing the severity of symptoms
 CC resulting from an autoimmune disease in a mammal. The liposomes have long
 CC circulating half-life in mammalian plasma. AAZ48119 to AAZ48130 represent
 CC antisense oligonucleotide sequences used in the exemplification of the
 XX present invention
 XX
 XX Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 845 GTGGCTCAGACTCCCTATCT 864
 DB 1 GTGTGCAGACACCTATCT 20
 RESULT 1226
 AAZ49387
 ID AAZ49387 standard; DNA; 20 BP.
 XX
 XX AAZ49387;
 XX
 XX 14-MAR-2000 (first entry)
 DT
 XX TNF-alpha targeted phosphorothioate antisense oligo ISIS 28089.
 DE
 XX Cellular proliferation; expression; modulation; antisense;
 XX non-parenteral; delivery; uptake; administration; emulsion;
 KW ulcerative colitis; Crohn's disease; inflammatory bowel disease;
 KW

KW TNF-alpha; tumour necrosis factor alpha; ss.
 XX
 OS Synthetic.
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "Phosphorothioate linkages"
 FT modified_base 1..4
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "2'-methoxyethoxy oligonucleotides"
 FT modified_base 6
 FT /*tag= c
 FT /mod_base= m5c
 FT modified_base 7
 FT /*tag= d
 FT /mod_base= m5c
 FT modified_base 11
 FT /*tag= e
 FT /mod_base= m5c
 FT modified_base 13
 FT /*tag= f
 FT /mod_base= m5c
 FT modified_base 14
 FT /*tag= g
 FT /mod_base= m5c
 FT modified_base 15
 FT /*tag= h
 FT /mod_base= m5c
 FT modified_base 17..20
 FT /*tag= i
 FT /mod_base= OTHER
 FT /note= "2'-methoxyethoxy oligonucleotides"
 FT modified_base 19
 FT /*tag= j
 FT /mod_base= m5c
 XX WO9960012-A1.
 XX 25-NOV-1999.
 XX 20-MAY-1999; 99WO-US011394.
 XX 21-MAY-1998; 98US-00082624.
 XX (ISIS-) ISIS PHARM INC.
 XX
 XX Teng C, Cook PD, Tillman L, Hardee GE, Ecker DJ, Manoharan M;
 PI WPI; 2000-072428/06.
 DR
 XX New oligonucleotide compositions used for the non-parenteral delivery of
 PT e.g. antisense oligos, ribozymes, peptide nucleic acids, molecular
 PT decoys, external guide sequences or aptamers.
 XX
 XX Claim 80; Page 38; 133pp; English.
 PS
 XX Sequences AAZ49344-Z49354, AAZ49384-Z49385, AAZ49387-Z49388 and AAZ49392-
 CC Z49393 represent antisense oligonucleotides designed to modulate the rate
 CC of cellular proliferation. The invention relates to new compositions for
 CC the non-parenteral delivery of oligonucleotides comprising at least one
 CC oligonucleotide in an emulsion. Oligonucleotides delivered via the
 CC compositions of the invention can be used to modulate expression of a
 CC cellular adhesion protein, modulate a rate of cellular proliferation, or
 CC have biological activity against eukaryotic pathogens or retroviruses.
 CC They can be used for treating conditions including e.g., ulcerative
 CC colitis, Crohn's disease, inflammatory bowel disease or undue cellular
 CC proliferation. The compositions can enhance the local and systemic uptake
 CC and delivery of nucleic acids via non-parenteral routes of administration
 CC (e.g., via the alimentary canal, skin, eyes, pulmonary tract, urethra or

```

CC vagina)
XX
SQ Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

Query Match      0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 845 GTGGCTCAGACTCCCTATCT 864
DB 1 GTGGCCAGACCCCTATCT 20

RESULT 1227
AAC73714
ID AAC73714 standard; DNA; 20 BP.
XX
AC AAC73714;
XX
DT 02-FEB-2001 (first entry)
XX
DE Human IL-5 antisense oligonucleotide ISIS #16039.
XX
KW Human; interleukin-5; IL-5; signal transduction;
KW antisense oligonucleotide; antiasthmatic; immunosuppressive; cytostatic;
KW IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
KW inflammation; cancer; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200058512-A1.
XX
PD 05-OCT-2000.
XX
PF 17-MAR-2000; 2000WO-US007318.
XX
PR 26-MAR-1999; 99US-00280799.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Dean NM, Karras JG, McKay R;
XX
DR WPI; 2000-594648/56.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200058512-A1.
XX
PD 05-OCT-2000.
XX
PF 17-MAR-2000; 2000WO-US007318.
XX
PR 26-MAR-1999; 99US-00280799.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Dean NM, Karras JG, McKay R;
XX
DR WPI; 2000-594648/56.
XX
PT Antisense oligonucleotide compound used to treat asthma and eosinophilic
PT syndrome in humans modulates interleukin-5 signal transduction.
XX
PS Example 20; Page 64; 156pp; English.
XX
CC The present sequence is an oligonucleotide used for antisense modulation
CC of interleukin-5 (IL-5) signal transduction. Oligonucleotides were
CC designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha.
CC The antisense oligonucleotides may be used for the treatment of diseases
CC associated with IL-5 signal transduction, IL-5 expression or IL-5
CC receptor-alpha expression. Such diseases include asthma and eosinophilic
CC syndrome. The oligonucleotides are also useful for research uses and to
CC prevent or delay infection, inflammation or tumour formation
XX
SQ Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;

Query Match      0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1321 TTCTCCGATTCTGAGAGGA 1340
DB 1 TCCTCAGAGTCTGGAGAGGA 20

RESULT 1228
AAC49026
ID AAA49026 standard; DNA; 20 BP.
XX
AC AAA49026;
XX
DT 07-DEC-2000 (first entry)
XX
DE PCR primer #1 targeted to exon 4 of human cardiac actin gene.
XX
KW Cardiac actin; ACTC; human; gene therapy; IDC; 15q14;
KW idiopathic dilated cardiomyopathy; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN US6063576-A.
XX
PD 16-MAY-2000.
XX

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PF	29-JUN-1998;	98US-00106217.	PS	Claim 11; Col 41; 33pp; English.
XX			XX	
PR	29-JUN-1998;	98US-00106217.	CC	The invention provides antisense oligonucleotides which are targeted to a
XX			CC	nucleic acid encoding a mitogen-activated protein kinase (MAPK) kinase 6.
PA	(UTAH) UNIV UTAH RES FOUND.		CC	The antisense oligonucleotides are used to inhibit MAPK kinase 6
XX			CC	expression, and so are used to treat diseases mediated by MAPK kinase 6
PI	Olson TM, Keating MT;		CC	expression. They may also be used to detect MAPK kinase 6, e.g. in
XX			CC	sandwich assays. Sequences AAZ98558-597 represent antisense oligos
XX			CC	inhibiting human MAPK kinase 6 mRNA
DR	WPI; 2000-375488/32.		XX	
XX			SQ	Sequence 20 BP; 1 A; 4 C; 4 G; 11 T; 0 U; 0 Other;
PT	New cardiac actin gene comprising histidine to arginine or glycine to			
PT	glutamic acid substitution, useful in the diagnosis of diseases			
PT	associated with the mutation, specifically idiopathic dilated			
PT	cardiomyopathy.			
XX			Query Match	0.7%; Score 13.6; DB 1; Length 20;
PS	Example 2; Col 37; 36pp; English.		Best Local Similarity	80.0%; Pred. No. 1.1e+03;
XX			Matches	16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
CC	The present invention relates to human cardiac actin (ACTC) (AA94568).			
CC	Genotypic analyses show that ACTC is linked to idiopathic dilated			
CC	cardiomyopathy (IDC). The ACTC gene maps to chromosome 15q14. Six PCR			
CC	primer pairs (AAA49020 to AAA49031) have been developed to allow analysis			
CC	of the six exons of ACTC. The present sequence is primer #1 for exon 4 of			
CC	the ACTC gene. Studies of two families with IDC showed the presence of			
CC	two mutations, one in exon 5 and one in exon 6. The mutations are G to A			
CC	in codon 312 (Arg312His) and A to G in codon 361 (Glu361Gly). The ACTC			
CC	protein may be used in a variety of methods for drug screening and for			
CC	rational drug design. The ACTC gene may be used to treat IDC by gene			
CC	therapy. Analysis of the ACTC gene provides early identification of			
CC	subjects likely to develop or who already have IDC			
XX				
SQ	Sequence 20 BP; 4 A; 9 C; 2 G; 5 T; 0 U; 0 Other;			
			Query Match	0.7%; Score 13.6; DB 1; Length 20;
			Best Local Similarity	80.0%; Pred. No. 1.1e+03;
			Matches	16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
OY	158 CTCACCGAATCCGATGACT 177			
Db	1 CTCACGTGATCCGCTACT 20			
RESULT 1230				
AAZ98576/c				
ID	AAZ98576 standard; DNA; 20 BP.			
XX				
AC	AAZ98576;			
XX				
DT	19-JUN-2000 (first entry)			
XX				
DE	Human MAPK kinase 6 inhibiting antisense oligo ISIS# 101481.			
XX				
XW	Mitogen-activated protein kinase; MAPK; MAPK kinase 6; antisense;			
KW	sandwich assay; human; ss.			
OS	Homo sapiens.			
XX				
PN	US6033910-A.			
XX				
PD	07-MAR-2000.			
XX				
PF	19-JUL-1999; 99US-00357073.			
XX				
PR	19-JUL-1999; 99US-00357073.			
XX				
PA	(ISIS-) ISIS PHARM INC.			
XX				
PI	Monia BP, Cowseert LM;			
XX				
XX				
DR	WPI; 2000-269479/23.			
XX				
PT	Novel antisense oligonucleotides used for inhibition of Mitogen-activated			
PT	protein kinase kinase 6 expression.			
XX				
OS	Bacillus thuringiensis CryET39 PCR primer SEQ ID NO:34.			
XX				
DE	Bacillus thuringiensis; coleopteran; toxic; insect resistant plant;			
KW	delta-endotoxin; transgenic plant; insecticide; crystal protein;			
KW	PCR primer; ss.			
XX				
OS	Bacillus thuringiensis.			
XX				
PN	WO200066742-A2.			
XX				
PD	09-NOV-2000.			
XX				
PF	03-MAY-2000; 2000WO-US012136.			
XX				
PR	04-MAY-1999; 99US-0172240P.			
XX				
PA	(MONS) MONSANTO CO.			
XX				
PI	Rupar MJ, Donovan WP, Chu C, Pease E, Tan Y, Slaney AC;			
PI	Malvar TM, Baum JA;			
XX				
DR	WPI; 2000-679761/66.			
XX				
PT	New Bacillus thuringiensis polypeptide for use as an insecticide in			
PT	protecting plants, such as, corn, wheat, oat, tobacco, or potato plants			
PT	and in controlling insect populations, such as, Colorado potato beetle			
PT	and southern rootworm.			
XX				
PS	Example 13; Page 129; 198pp; English.			
XX				
CC	The present invention describes Bacillus thuringiensis crystal proteins,			
CC	which have insecticide activity and are mid-gut cell wall disruptors. The			
CC	B. thuringiensis crystal proteins can be used in compositions as an			
CC	insecticide. The polynucleotides encoding the crystal proteins are used			
CC	to detect a nucleic acid encoding a delta-endotoxin polypeptide and to			
CC	transform plants such as corn, wheat, oat, rice, barley, turf grass,			
CC	pasture grass, legume, soybean, tobacco, tomato, potato, cotton, fruit,			
CC	berry, vegetable or tree to make it insect resistant. Insect populations,			
CC	such as, Colorado potato beetle and southern rootworm can be controlled			
CC	by expressing the crystal proteins in a plant. The crystal proteins can			
CC	be used to kill or reduce the numbers of target insects in an area or			
CC	applied to an area to prevent infestation by a susceptible insect.			
CC	Antibodies to the crystal proteins are used to detect them in a sample.			
CC	The crystal proteins are only distantly related to other delta-endotoxins			

CC toxic to dipteran or coleopteran insects and so provide for a new
CC insecticide which insects have not become resistant to. The present
CC sequence represents a PCR primer for the B. thuringiensis CryET39
CC protein, which is used in an example from the present invention
XX
SQ Sequence 20 BP; 7 A; 3 C; 6 G; 4 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
Qy 509 GCTTCTGTTACGTCAATGAT 528
Db 20 GCTTCTATTCCGGCAATCAT 1
RESULT 1232
AAA94546
ID AAA94546 standard; DNA; 20 BP.
XX
AC AAA94546;
XX
XX 10-JAN-2001 (first entry)
DT
XX
XX Example biologically active oligonucleotide #9.
XX
XX Oligonucleotide; non-parenteral; multi-particulate; phosphorothioate;
KW 2'-O-methoxyethyl; 5-methylcytidine; ss.
KW
XX Synthetic.
OS
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate internucleotide linkage"
FT modified_base 1..4
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl nucleoside"
FT modified_base 6
FT /*tag= c
FT /mod_base= m5c
FT modified_base 7
FT /*tag= d
FT /mod_base= m5c
FT modified_base 11
FT /*tag= e
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl nucleoside"
FT modified_base 13
FT /*tag= f
FT /mod_base= m5c
FT modified_base 14
FT /*tag= g
FT /mod_base= m5c
FT modified_base 15
FT /*tag= h
FT /mod_base= m5c
FT modified_base 16..20
FT /*tag= i
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl nucleoside"
FT modified_base 19
FT /*tag= j
FT /mod_base= m5c
FT
FT
XX
XX WO2000050050-A1.
XX
XX 31-AUG-2000.
XX
XX 23-FEB-2000; 2000WO-US004662.
XX

PR 23-FEB-1999; 99US-00256515.
XX (ISIS-) ISIS PHARM INC.
PA
XX Hardee GE, Tillman LG, Mehta RC, Teng C;
FI WPI; 2000-572032/53.
XX
XX Non-parenteral multi-particulate formulations comprise biologically
PT active substances bound to carrier particles for delivery across mucosal
PT membranes.
XX
XX Disclosure; Page 8; 38pp; English.
XX
XX The present invention relates to non-parenteral multi-particulate
CC formulations for transporting agents (for example therapeutic) across
CC mucosal membranes. The formulations comprise carrier particles bound with
CC a biologically active agent and a penetration enhancer. The formulations
CC associate with buccal, nasal, pulmonary, gastrointestinal and vaginal
CC mucosal membranes to transport the biologically active agents to the
CC lymph system, blood system or epithelial tissue of the subject. The
CC formulation is administered orally which is preferred by patients. The
CC present sequence is an example oligonucleotide that may be used in the
CC formulation
XX
SQ Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
Qy 845 GTGGCTCAGACTCCCTATCT 864
Db 1 GTGGCCAGACACCTATCT 20
RESULT 1233
AAC81760/c
ID AAC81760 standard; DNA; 20 BP.
XX
AC AAC81760;
XX
XX 23-FEB-2001 (first entry)
DT
XX
XX Plant tissue specific gene expression related sequence SEQ ID NO: 18.
DE
XX Random oligonucleotide library; tissue specific gene expression; plant;
KW disease resistance; herbicide resistance; ss.
KW
XX Unidentified.
OS
XX US6140080-A.
PN
XX 31-OCT-2000.
PD
XX
XX 10-SEP-1998; 98US-00150805.
PF
XX
XX 17-MAY-1996; 96US-00649172.
PR
XX 22-DEC-1997; 97US-00996069.
PR
XX (PION-) PIONEER HI-BRED INT INC.
PA
XX Lu G, Bruce W;
XX
XX WPI; 2000-678827/66.
XX
XX New root-preferred transcription regulatory elements useful for driving
PT tissue-preferred gene expression conferring a selective advantage to
PT plants, e.g. resistance to pests, pathogens, herbicides or adverse
PT conditions.
XX
XX Example 1; Fig 4; 26pp; English.
XX

DE PCR primer for a minimal deletion in FRA16D oxidoreductase gene.

XX Cancer associated protein; FOR gene; FRA16D; fragile site; aphidicolin;
 KW chromosomal rearrangement; cancer; splice variant; DNA instability;
 KW FRA16D oxidoreductase; neoplasia; PCR primer; ss.
 XX Homo sapiens.
 XX WO200144466-A1.
 XX 21-JUN-2001.
 XX 15-DEC-2000; 2000WO-AU001539.
 XX 16-DEC-1999; 99AU-00004711.
 XX 19-APR-2000; 2000AU-00007025.
 XX (WOMEN-) WOMEN'S & CHILDREN'S HOSPITAL.
 XX Richards R, Ried K, Finnis M, Hobson L, Mangelsdorf M, Dayan S;
 PI Nancarrow J, Woollatt E, Baker E;
 XX WPI; 2001-398151/42.
 XX Novel isolated 16q23.2 nucleic acid molecule, FRA16D oxidoreductase (FOR)
 PT gene associated with FRA16D site, useful for early diagnosis and
 PT assessment of risk of cancers associated with the FRA16D region.
 XX Example 1; Page 46; 150pp; English.
 XX PCR primers AAH27888-AAH28055 represent PCR primers used to amplify and
 CC identify minimal deletions in the human FRA16D oxidoreductase (FOR) gene.
 CC The FOR gene encodes a cancer associated protein. The FRA16D site is a
 CC fragile site induced by aphidicolin, which is located within the FOR
 CC gene. The fragile site is the location of breakpoints of a variety of
 CC chromosomal rearrangements, and other mutations associated with cancers.
 CC The FOR protein is expressed as a number of splice variants. FOR gene
 CC polynucleotide fragments are capable of acting as specific primers or
 CC probes for detecting cancer associated variations of DNA sequence such as
 CC a point mutation or small DNA rearrangement associated with the tumour, a
 CC breakpoint of one or more chromosomal rearrangements associated with the
 CC tumour and a pause site within the FRA16 gene. FOR nucleic acid molecules
 CC are useful as markers to identify relationship between the fragile site
 CC (FRA16D) and the DNA instability in neoplasia which allows better
 CC diagnosis of cancers associated with the region
 XX Sequence 20 BP; 2 A; 6 C; 4 G; 8 T; 0 U; 0 Other;
 SQ Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1468 AAGCCAGAGCCAAAGGGGT 1487
 |||||
 DB 20 AAGCGAAGACCAATGAGCT 1
 RESULT 1239
 AA03305/c
 ID AA03305 standard; DNA; 20 BP.
 XX AA03305;
 AC
 XX 13-JUN-2001 (first entry)
 DT
 XX Forward primer #5 used to detect mutation in Sus scrofa PRKAG3 gene.
 DE Pig; gamma subunit; adenosine monophosphate-activated kinase; AMPK;
 KW PRKAG3; diabetes; obesity; myopathy; cardiovascular disease; anorectic;
 KW genetic testing; carbohydrate metabolism disorder; skeletal muscle;
 KW cystathione beta synthase; CBS; cardiatic; gene therapy; PCR primer; ss.
 XX Sus scrofa.
 OS
 XX

PN WO200120003-A2.
 XX 22-MAR-2001.
 XX 11-SEP-2000; 2000WO-EF009896.
 XX 10-SEP-1999; 99EP-00402236.
 PR 18-MAY-2000; 2000EP-00401388.
 XX (INRG) INRA INST NAT RECH AGRONOMIQUE.
 PA (ANDE/) ANDERSSON L.
 PA (LOOF/) LOOFT C.
 PA (KALM/) KALM E.
 XX Andersson L, Looft C, Kalm E, Milan D, Robic A, Rogel-Gaillard C;
 PI Iannuccielli N, Gellin J, Le Roy P, Chardon P;
 XX WPI; 2001-244810/25.
 XX New variants of the gamma subunit of vertebrate adenosine monophosphate-
 PT activated kinase for diagnosis or treatment of disorders associated with
 PT energy metabolism such as diabetes, obesity, and myopathy.
 XX Claim 33; Page 21; 71pp; English.
 XX The present sequence is a forward PCR primer used to amplify pig PRKAG3
 CC DNA segment linked to a microsatellite marker MS482H65 for detection of
 CC functionally altered allele of Prkag3 gene. PRKAG3 is a muscle-specific
 CC isoform of adenosine monophosphate (AMP)-activated kinase (AMPK) gamma
 CC subunit. Mutation in Prkag3 results in an altered regulation of
 CC carbohydrate metabolism, particularly in skeletal muscle. PRKAG3 is
 CC useful as therapeutic for treating carbohydrate metabolism disorders such
 CC as diabetes, obesity, and disorders associated with muscle metabolism
 CC and for myopathy and cardiovascular diseases, to modulate AMPK activity,
 CC such as restoring a normal AMPK function. PRKAG3 sequence and its
 CC functionally altered mutants are useful for the diagnostic evaluation,
 CC genetic testing and prognosis of a metabolic disorder, preferably a
 CC carbohydrate metabolism disorder. Primers that can detect a genetic
 CC polymorphic marker linked to a sequence encoding PRKAG3, are useful for
 CC detecting a dysfunction of carbohydrate metabolism resulting from the
 CC expression of a functionally altered allele of PRKAG3. Transgenic animal
 CC and host cell transformed with PRKAG3 or a heterotrimeric AMPK consisting
 CC of PRKAG3 or its mutant, are useful for screening compounds able to
 CC modulate AMPK activity. Nucleic acid encoding PRKAG3 is useful for
 CC detecting mutations in a Prkag3 gene, or in a sequence encoding the first
 CC cystathione beta synthase (CBS) domain of PRKAG3 and is useful in gene
 CC therapy
 XX Sequence 20 BP; 1 A; 8 C; 3 G; 8 T; 0 U; 0 Other;
 SQ Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1459 AAGGAGGAGAGCCAGAGGC 1478
 |||||
 DB 20 AAGTAGGGGCGACAGAGGC 1
 RESULT 1240
 AAS10599/c
 ID AAS10599 standard; DNA; 20 BP.
 XX AAS10599;
 AC
 XX 24-OCT-2001 (first entry)
 DT
 XX Human caspase 3 antisense oligonucleotide 108923.
 DE Human caspase 3; apoptosis; hyperproliferative disorder; hepatitis;
 KW viral infection; haematopoietic disorder; autoimmune disorder;
 KW atherosclerosis; neurological disorder; antisense; phosphorothioate; ss.
 OS
 XX

KW Human; Oestrogen receptor beta; ERbeta; ds; SNP; chromosome 6q.25.1;
 KW single nucleotide polymorphism; cardiovascular disease; 5' splice donor;
 KW autoimmune disease; systemic lupus erythematosus; arthritis; rheumatism;
 KW osteoarthritis; osteoporosis; breast cancer; endometrial cancer.
 XX
 OS Homo sapiens.
 XX
 PN WO200162793-A2.
 XX
 PD 30-AUG-2001.
 XX
 PF 20-FEB-2001; 2001WO-US005360.
 XX
 PR 22-FEB-2000; 2000US-0183755P.
 PR 24-JAN-2001; 2001US-00766185.
 XX
 PA (PEXE) PE CORP NY.
 XX
 XX Kalush F, Cassel MJ, Hwang SS, Winn-Deen ES;
 PI WPI; 2001-582041/65.
 XX
 DR Estrogen receptor gene and protein polymorphisms useful for diagnosis of
 PT individuals at risk of developing bone disorders.
 PT
 XX
 PS Example 2; Page 56; 245pp; English.
 PS
 CC The invention relates to a novel isolated peptide comprising or
 CC consisting of an amino acid sequence selected from an amino acid sequence
 CC of a variant oestrogen receptor protein (e.g. ERbeta), or a fragment of
 CC 10 amino acids), antibodies against them, nucleic acids encoding them
 CC (including vectors for transforming cells). The gene for human ERbeta is
 CC located on chromosome 6q.25.1. The variants are encoded by single
 CC nucleotide polymorphisms (SNP). The variant peptides and proteins can be
 CC used in assays to determine the biological activity of the protein, to
 CC raise antibodies, as a reagent in assays designed to quantitatively
 CC determine levels of the protein in biological fluids, to identify
 CC compounds that modulate receptor activity and to screen compounds for the
 CC ability to stimulate or inhibit interaction between the receptor protein
 CC and a target molecule that normally interacts with the receptor protein
 CC e.g. oestrogen. The antibody can be used to isolate the protein, to
 CC assess expression in disease states e.g. cardiovascular disease and
 CC autoimmune disease (e.g. systemic lupus erythematosus, arthritis,
 CC rheumatism and osteoarthritis), osteoporosis, breast cancer and
 CC endometrial cancer. In addition the antibodies can be used in
 CC pharmacogenomic analysis and inhibiting protein function, e.g. blocking
 CC the binding of the oestrogen receptor protein to a binding partner such
 CC as a ligand. The nucleic acids encoding the proteins can be used as
 CC probes, primers, chemical intermediates and in biological assays. The
 CC present sequence is a 5' splice donor site from the human ERbeta gene
 XX
 XX Sequence 20 BP; 6 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1741 GGTCCAGGTCGGGTGAAA 1760
 Db 20 GGTCCAGGTCATTGAAA 1
 RESULT 1243
 AAF70145
 ID AAF70145 standard; DNA; 20 BP.
 XX
 AC AAF70145;
 XX
 DT 18-APR-2001 (first entry)
 XX
 DE Human TNFRSF11B gene fragment 2 forward PCR primer.
 DE
 XX Human; TNFRSF11B; osteoclastogenesis inhibitory factor;
 KW

KW single nucleotide polymorphism; SNP; osteoclast recruitment;
 KW osteoclast function; osteoporosis; metastatic bone disease;
 KW Paget's disease; rheumatoid arthritis; periodontal bone disease;
 KW PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200104137-A1.
 XX
 PD 18-JAN-2001.
 XX
 PF 10-JUL-2000; 2000WO-US018803.
 XX
 PR 09-JUL-1999; 99US-0143020P.
 XX
 PA (GENA-) GENAISSANCE PHARM INC.
 XX
 XX Chew A, Denton RR, Duda A, Nandabalan K, Stephens JC;
 PI WPI; 2001-147175/15.
 XX
 DR Human Osteoclastogenesis Inhibitory Factor nucleotides, comprising single
 PT nucleotide polymorphisms, useful for studying e.g. osteoporosis, Paget's
 PT disease and rheumatoid arthritis.
 XX
 PS Example 1A; Page 35; 114pp; English.
 PS
 CC The present sequence is a primer used to isolate polymorphic regions of
 CC the human osteoclastogenesis inhibitory factor (TNFRSF11B).
 CC Polynucleotides comprising one or more of twenty four novel single
 CC nucleotide polymorphisms in the TNFRSF11B gene have been identified.
 CC TNFRSF11B regulate osteoclast recruitment and function. An understanding
 CC of variations in the gene should thus be useful in developing new
 CC therapies for metabolic disorders caused by abnormal osteoclast
 CC recruitment and function such as osteoporosis, metastatic bone disease,
 CC Paget's disease, rheumatoid arthritis and periodontal bone disease
 XX
 XX Sequence 20 BP; 5 A; 8 C; 5 G; 2 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1628 TATCCCGGAGGACAAACC 1647
 Db 1 TCTCCCGGAGGACAGACC 20
 RESULT 1244
 AAC67700/c
 ID AAC67700 standard; DNA; 20 BP.
 XX
 AC AAC67700;
 XX
 DT 16-FEB-2001 (first entry)
 XX
 DE Oligonucleotide #11 ISIS #116879.
 XX
 KW Antinflammatory; cytostatic; antibacterial; methionine aminopeptidase 2;
 KW inhibitor; MetAP2; eukaryotic initiation factor associated protein; p67;
 KW eIF-2; protein synthesis; antisense oligonucleotide; infection; human;
 KW inflammation; tumour; phosphorothioate; 2-methoxyethyl wing; ss.
 XX
 OS Homo sapiens.
 XX
 PN US6136604-A.
 XX
 PD 24-OCT-2000.
 XX
 PF 27-OCT-1999; 99US-00428584.
 XX
 PR 27-OCT-1999; 99US-00428584.
 PR
 XX

PA (ISIS-) ISIS PHARM INC.
 XX Monia BP, Wyatt J;
 XX WPI; 2001-030942/04.
 XX
 XX New antisense compounds which specifically hybridize with and inhibit
 PT human methionine aminopeptidase 2 expression, useful for treating
 PT methionine aminopeptidase 2 related disorders and preventing inflammation
 PT or tumor formation.
 XX
 XX Claim 14; Col 41-42; 39pp; English.
 PS
 XX Methionine aminopeptidase 2 (also known as MetAP2 and eukaryotic
 CC initiation factor [eIF-2]) associated protein, p67) is a cellular
 CC glycoprotein that promotes protein synthesis in the presence of active
 CC eIF-2 kinases by protecting the eIF-2 alpha subunit from phosphorylation.
 CC The present invention relates to antisense oligonucleotides (AAC67690-
 CC C67767) which inhibit human methionine aminopeptidase 2 coding sequence
 CC expression (see AAC67683). The present sequence is one such antisense
 CC oligonucleotide. The present sequence may be used for treating a patient
 CC suspected of having or being prone to a disease or condition associated
 CC with expression of MetAP2. In addition, the present sequence can also be
 CC used as research reagents, diagnostics and to distinguish between
 CC functions of various members of a biological pathway. The antisense
 CC oligonucleotide may further be used prophylactically, e.g. to prevent or
 CC delay infection, inflammation or tumour formation. Note: the present
 CC sequence may have a phosphorothioate backbone and 2-methoxyethyl (2'-MOE)
 CC wings
 XX
 SQ Sequence 20 BP; 0 A; 6 C; 0 G; 14 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1395 AACAGAGGATCAAAAAGAGA 1414
 DB 20 AAAGAGAGAGAGAGAGAGA 1
 RESULT 1245
 AAD12176/c
 ID AAD12176 standard; DNA; 20 BP.
 XX
 AC AAD12176;
 XX
 XX 25-SEP-2001 (first entry)
 XX
 XX Rat PTP1B antisense oligonucleotide (ISIS# 111622).
 DE
 XX Rat; PTP1B; protein phosphatase 1B inhibitor; antisense; gene therapy;
 KW infection; inflammation; tumour; prophylaxis; phosphorothioate; ss.
 XX
 OS Rattus norvegicus.
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "Phosphorothioate backbone"
 FT modified_base 1..5
 FT /tag= b
 FT /mod_base= OTHER
 FT /note= "Methoxyethyl residues"
 FT modified_base 2..3
 FT /tag= d
 FT /mod_base= m5c
 FT modified_base 6
 FT /tag= e
 FT /mod_base= m5c
 FT modified_base 8..9

FT /tag= f
 FT /mod_base= m5c
 FT 11
 FT /tag= g
 FT /mod_base= m5c
 FT 14..15
 FT /tag= h
 FT /mod_base= m5c
 FT 16..20
 FT /tag= c
 FT /mod_base= OTHER
 FT 20
 FT /note= "Methoxyethyl residues"
 FT /tag= i
 FT /mod_base= m5c
 XX
 XX US6261840-B1.
 XX 17-JUL-2001.
 XX
 XX 18-JAN-2000; 2000US-00487368.
 XX
 XX 18-JAN-2000; 2000US-00487368.
 XX
 XX (ISIS-) ISIS PHARM INC.
 XX Cowsett LM, Wyatt J;
 XX WPI; 2001-432181/46.
 XX
 XX New antisense compounds capable of modulating expression of human protein
 PT phosphatase 1B, useful for diagnosis, prophylaxis and treatment of
 PT diseases associated with expression of protein phosphatase.
 XX
 XX Claim 1; Col 53-54; 71pp; English.
 XX
 XX The invention is directed to antisense compounds, particularly
 CC oligonucleotides which are targeted to a DNA encoding protein
 CC phosphatase 1B (PTP1B) to modulate its expression. The antisense
 CC compounds are useful for diagnosis, prophylaxis and treatment of diseases
 CC associated with the expression of PTP1B, to prevent or delay infection,
 CC inflammation and tumour formation and as a research reagent. The PTP1B
 CC DNA is useful in gene therapy. The present sequence is an antisense
 CC oligonucleotide with a phosphorothioate backbone. This oligo is targeted
 CC to rat PTP1B to inhibit its expression
 XX
 SQ Sequence 20 BP; 2 A; 9 C; 4 G; 5 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 238 GCCAATGCTGAGGAGATGAC 257
 DB 20 GCACAGGCTGAGGAGATGAC 1
 RESULT 1246
 AAD14646
 ID AAD14646 standard; DNA; 20 BP.
 XX
 XX AAD14646;
 XX
 XX 11-SEP-2003 (revised)
 DT 01-NOV-2001 (first entry)
 XX
 XX DEN-1 PDK-13 virus mRNA amplifying RT-PCR forward amplicon D1V-5040.
 DE
 XX Flavivirus; Dengue virus-1; DEN-1; vaccine; infection; virucidal;
 KW avirulent; immunogenic; viral disease; pharmaceutical; RT-PCR primer; ss.
 XX
 OS Dengue virus; type 1.
 XX

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PN WO200160847-A2.
XX
PD 23-AUG-2001.
XX
PF 16-FEB-2001; 2001WO-US005142.
XX
PR 16-FEB-2000; 2000US-0182829P.
XX
PA (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
PI Kinney RM, Kinney CYH, Butrapet S, Gubler DL, Bhamarapratvati N;
XX
DR WPI; 2001-497162/54.
XX
XX Chimeric flaviviruses that are avirulent and immunogenic, useful for
PT vaccinating against a range of dengue viruses.
XX
PS Disclosure; Page 88; 470pp; English.
XX
CC The invention relates to avirulent, immunogenic flavivirus chimeras
CC comprising amino acid mutations in the non-structural proteins of a
CC flavivirus. Chimeric viruses containing the attenuation-mutated non-
CC structural genes of the virus are used as a backbone into which the
CC structural protein genes of a second flavivirus strain are inserted.
CC These chimeric viruses elicit pronounced immunogenicity but lack the
CC accompanying clinical symptoms of viral disease. Attenuated chimeric
CC flaviviruses are combined in a pharmaceutical composition to confer
CC simultaneous immunity against several strains of pathogenic flaviviruses
CC such as dengue virus serotypes DEN-1, DEN-2, DEN-3 and DEN-4. Immunogenic
CC flavivirus chimeras are also used as immunogens or multivalent vaccines
CC to confer simultaneous protection against infections. The present DNA
CC sequence is a RT (reverse transcriptase)-PCR amplicon which is used for
CC amplifying the cDNA amplicon amplified from the viral genomic DEN-1 RNA
CC template. The primer is used for diagnosing dengue-1 (DEN-1) FDK-13
CC vaccine virus-specific genetic mutation at genome nucleotide position
CC 5063. (Updated on 11-SEP-2003 to standardise OS field)
XX
XX Sequence 20 BP; 8 A; 4 C; 6 G; 2 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 552 GCTAAGTATCACCAGG 571
Db 1 GCTAAGCATCACAGAAG 20
RESULT 1247
AAD21416
ID AAD21416 standard; DNA; 20 BP.
XX
AC AAD21416;
XX
DT 28-JAN-2002 (first entry)
XX
DE Human PKC-alpha antisense oligonucleotide, ISIS #3884.
XX
KW Human; c-jun; protein kinase C; PKC alpha modulator; cytostatic; therapy;
KW cancer; antisense; ss.
XX
OS Homo sapiens.
XX
XX US6300320-B1.
XX
PD 09-OCT-2001.
XX
PF 05-JAN-1999; 99US-00225749.
XX
PR 05-JAN-1999; 99US-00225749.
XX
PA (ISIS-) ISIS PHARM INC.
XX

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PI Dean NM, McKay R;
XX
DR WPI; 2001-656239/75.
XX
PT Reducing expression of c-jun, useful in treatment of specific cancers, by
PT antisense inhibition of protein kinase C-alpha expression.
XX
PS Example 2; Col 24; 38pp; English.
XX
CC The patent discloses methods and compositions for modulating c-jun
CC expression with protein kinase C (PKC) alpha specific inhibitors. The
CC specific inhibitors are antisense oligonucleotides capable of hybridising
CC to PKC-alpha. The method is used to treat cancer of the bladder, bone,
CC lung, ovary or central nervous system. The present DNA sequence is human
CC PKC-alpha antisense oligonucleotide, ISIS #3884. This sequence is
CC targetted to the 3' untranslated region (UTR) of the PKC-alpha gene
XX
XX Sequence 20 BP; 9 A; 4 C; 6 G; 1 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1409 AAGAGAAAGACCCAGAGG 1428
Db 1 AAGAGAGAGACCCCTGAACAG 20
RESULT 1248
AAC84812/c
ID AAC84812 standard; DNA; 20 BP.
XX
AC AAC84812;
XX
DT 20-APR-2001 (first entry)
XX
DE Human TLR4 gene exon 4 amplifying reverse primer.
XX
KW TLR4; toll receptor 4; innate immunity; gram-negative bacteria; sepsis;
KW respiratory distress syndrome; LPS; lipopolysaccharide; asthma; ARDS;
KW chronic airway disease; arthritis; inflammatory disease; SIRS; human;
KW systemic inflammatory response syndrome; pyelonephritis; bronchitis;
KW acute respiratory distress syndrome; gall bladder disease; pneumonia;
KW cystic fibrosis; antibacterial; antiinflammatory; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200077204-A1.
XX
PD 21-DEC-2000.
XX
PF 08-JUN-2000; 2000WO-US015723.
XX
PR 10-JUN-1999; 99US-00329515.
XX
PA (IOWA ) UNIV IOWA RES FOUND.
PA (LORE/) LORENZ E.
XX
XX Lorenz E, Schwartz DA, Schutte BC;
XX
XX WPI; 2001-061872/07.
XX
PT Identifying humans at risk of, or having indication associated with
PT altered innate immunity involves detecting or determining whether DNA
PT amplified from a biological sample encodes a portion of variant toll
PT receptor 4.
XX
PS Example 1; Page 31; 97pp; English.
XX
CC The invention relates to human toll receptor 4 (TLR4) nucleic acid and
CC methods to identify polymorphisms at the human TLR4 locus and to identify
CC individuals at risk of, or having, an indication associated with altered
CC innate immunity. A variant TLR4 nucleic acid is useful as a diagnostic
CC

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CC reagent for detecting a polymorphism in human TLR4 gene. Since the
 CC presence of TLR4 mutation is associated with gram-negative sepsis,
 CC severity of sepsis, pre-term delivery and respiratory distress syndrome
 CC in pre-term infants, agents which alter TLR4 activity are useful for
 CC preventing or ameliorating infection by gram-negative bacteria, sepsis
 CC induced by gram-negative bacteria, LPS (lipopolysaccharide) induced
 CC chronic airway disease, asthma, arthritis, local and systemic
 CC inflammatory disease conditions such as systematic inflammatory response
 CC syndrome (SIRS) or acute respiratory distress syndrome (ARDS), chronic
 CC pyelonephritis, gall bladder disease, pneumonia, bronchitis, chronic
 CC obstructive pulmonary disease, local gram-negative bacterial infection
 CC and cystic fibrosis. Sequences AAC84776-823 represent PCR primers for
 CC amplifying the exons of human TLR4 gene
 XX
 SQ Sequence 20 BP; 7 A; 3 C; 8 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1504 TTGGCCTGAATGACCTCTC 1523
 ||||| ||||| ||||| |||||
 Db 20 TTGACCTTCTGGACCTCTC 1

RESULT 1249
 AAD18429/c
 ID AAD18429 standard; DNA; 20 BP.

AC AAD18429;

DT 18-DEC-2001 (first entry)

DE Human progesterone receptor (PR) cDNA amplifying primer, PR-1.

XX Estrogen receptor-beta; dietary compound; environmental pollutant;
 KW red wine; ER-beta mediated cell growth inhibition modulator; human;
 KW RT-PCR primer; reverse transcription PCR; progesterone receptor; PR; ss.
 XX Homo sapiens.

XX WO200169262-A1.

XX 20-SEP-2001.

XX 15-MAR-2001; 2001WO-US008276.

XX 15-MAR-2000; 2000US-0189605P.

XX (UWMA-) UNIV MASSACHUSETTS.

FA Ho S;

PI WPI; 2001-596920/67.

XX In vitro screening for modulator of estrogen receptor-beta-mediated cell
 PT growth inhibition by contacting cell having functional ER-beta protein
 PT with candidate compound and detecting ER-beta-regulated gene expression.

XX Example 3; Page 16; 49pp; English.

XX The invention relates to in vitro screening for modulator of estrogen
 CC receptor-beta (ER-beta)-mediated cell growth inhibition. The method
 CC involves contacting mammalian cell having functional ER-beta protein with
 CC candidate compound and detecting increase/decrease of ER-beta-regulated
 CC gene expression in presence of candidate compound compared to expression
 CC in absence of the compound. The method is useful for identifying a
 CC compound that modulates ER-beta-mediated cell growth inhibition. It is
 CC useful for testing dietary compounds, e.g. red wine, for the presence of
 CC estrogen mimics that trigger ER-beta-mediated processes, thus affecting
 CC physiological function positively or negatively and for testing
 CC environmental pollutants for the presence of estrogen mimics that may
 CC pose health risks involving ER-beta-mediated processes. The present

CC sequence is (reverse transcription PCR) RT-PCR primer used to amplify
 CC human progesterone receptor (PR) cDNA which is used in the
 CC exemplification of the invention
 XX
 SQ Sequence 20 BP; 7 A; 5 C; 6 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1527 CTCGGCTTCTGCTGAGTC 1546
 ||||| ||||| ||||| |||||
 Db 20 CTCGGCTTCTGCTGAGTC 1

RESULT 1250

AAF91319/c

ID AAF91319 standard; DNA; 20 BP.

XX AAF91319;

XX 04-MAY-2001 (first entry)

DE Human E2F transcription factor 1 antisense oligonucleotide #25.

XX Antisense; E2F transcription factor 1; human; infection; inflammation;
 KW tumour; ss.

XX Homo sapiens.

XX US6187587-B1.

XX 13-FEB-2001.

XX 02-MAR-2000; 2000US-00517584.

XX 02-MAR-2000; 2000US-00517584.

XX (ISIS-) ISIS PHARM INC.

XX Popoff I, Brown-Driver VL, Cowseert LM;

XX WPI; 2001-190981/19.

XX Antisense compound capable of inhibiting the expression of E2F
 PT transcription factor 1, useful for preventing or delaying infection,
 PT inflammation or tumor formation.

XX Claim 1; Col 42; 40pp; English.

XX The present invention relates to antisense compounds up to 30 nucleobases
 CC in length targeted to a E2F transcription factor 1. The invention is
 CC useful for inhibiting the expression of E2F transcription factor 1 in
 CC cells or tissues. The antisense oligonucleotides may also be used as a
 CC research agent and to prevent infection, inflammation or tumours

XX Sequence 20 BP; 3 A; 8 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 246 TGAGGAGATGACCAAGTACC 265
 ||||| ||||| ||||| |||||
 Db 20 TGAGGAGATGACCAAGTACC 1

RESULT 1251

AAF77436

ID AAF77436 standard; DNA; 20 BP.

XX AAF77436;

XX AAF77436;

DT 15-JUN-2001 (first entry)
 DE Primer SEQ ID 14 used in RNA detection method.
 XX
 KW RNA detection; primer; ss.
 XX
 OS Synthetic.
 XX
 PN JP2001037487-A.
 XX
 PD 13-FEB-2001.
 XX
 PF 21-OCT-1999; 99JP-00299946.
 XX
 PR 25-MAY-1999; 99JP-00145440.
 XX
 PA (KATO/) KATO K.
 XX
 DR WPI; 2001-285601/30.
 XX
 PT Detecting RNA, by amplification with an adapter primer and a gene
 PT specific primer.
 XX
 PS Example 1; Page 6; 14pp; Japanese.
 XX
 CC This invention relates to a method for the stepwise detection of RNA. The
 CC method makes use of adaptor primers and gene specific primers. The method
 CC allows highly sensitive detection of expressed RNA for particular
 CC diseases. The present sequence represents a primer used in an example
 CC illustrating the method of the invention
 XX
 SQ Sequence 20 BP; 9 A; 4 C; 3 G; 4 T; 0 U; 0 Other;

 Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. NO. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

 QY 253 ATGACCAAGTACCCAGCGA 272
 DB 1 ATGACAAATTACCATCGA 20

 RESULT 1252
 AAS08783/c
 ID AAS08783 standard; DNA; 20 BP.
 AC AAS08783;
 XX
 DT 26-SEP-2001 (first entry)
 XX
 DE Human PD-ABC form 1 DNA exon 33 5' splice site.
 XX
 KW PD-ATP-binding cassette; PD-ABC; chromosome 19p13.3; spleen; thymus; ds;
 KW peripheral blood leukocyte; bone marrow; lymph node; dyslipidaemia;
 KW cardiovascular disorder; inflammatory disorder; abnormal calcium flux;
 KW epilepsy; coronary artery disease; Tangier's disease; atherosclerosis;
 KW familial high-density lipoprotein deficiency; fatty liver disease;
 KW atherosclerosis; diabetes; insulin resistance; obesity; drug screening;
 KW alcoholism; retinal degeneration; hypertension; vascular disease.
 XX
 OS Homo sapiens.
 XX
 PN WO200153490-A1.
 XX
 PD 26-JUL-2001.
 XX
 PF 23-JAN-2001; 2001WO-US002191.
 XX
 PR 24-JAN-2000; 2000US-0177889P.
 PR 30-JUN-2000; 2000US-0215405P.
 XX
 PA (WARN) WARNER LAMBERT CO.
 XX
 PI Johns MA, Tafuri SR, Wang M;
 XX
 DR WPI; 2001-442259/47.
 XX
 PT New Human PD-ABC DNA molecules and proteins for diagnosis and treatment
 PT of dyslipidemia, epilepsy and diseases related to abnormal calcium flux.
 XX
 PS Disclosure; Page 40; 77pp; English.
 XX
 CC The sequence represents a splice site within a DNA molecule encoding

PI Johns MA, Tafuri SR, Wang M;
 XX
 DR WPI; 2001-442259/47.
 XX
 PT New Human PD-ABC DNA molecules and proteins for diagnosis and treatment
 PT of dyslipidemia, epilepsy and diseases related to abnormal calcium flux.
 XX
 PS Disclosure; Page 38; 77pp; English.
 XX
 CC The sequence represents a splice site within a DNA molecule encoding
 CC human PD-ATP-binding cassette (PD-ABC) protein. PD-ABC maps to chromosome
 CC 19p13.3 and is expressed in various tissues including spleen, thymus,
 CC peripheral blood leukocytes, bone marrow and lymph nodes. The PD-ABC DNA
 CC molecules and proteins are used to diagnose and treat cardiovascular
 CC disorders, inflammatory disorders, dyslipidaemia, epilepsy, diseases
 CC related to abnormal calcium flux, coronary artery disease, Tangier's
 CC disease, familial high-density lipoprotein deficiency, atherosclerosis,
 CC diabetes, fatty liver disease, insulin resistance, obesity, alcoholism,
 CC retinal degeneration, hypertension and vascular disease. The sequences
 CC are also used in drug screening assays
 XX
 SQ Sequence 20 BP; 3 A; 9 C; 4 G; 4 T; 0 U; 0 Other;

 Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. NO. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

 QY 1221 GGAGCCATCCTGAGGAGA 1240
 DB 20 GGAGCCATCCTGAGGAGTGA 1

 RESULT 1253
 AAS08874/c
 ID AAS08874 standard; DNA; 20 BP.
 XX
 AC AAS08874;
 XX
 DT 26-SEP-2001 (first entry)
 XX
 DE Human PD-ABC form 2 DNA exon 33 5' splice site.
 XX
 KW PD-ATP-binding cassette; PD-ABC; chromosome 19p13.3; spleen; thymus; ds;
 KW peripheral blood leukocyte; bone marrow; lymph node; dyslipidaemia;
 KW cardiovascular disorder; inflammatory disorder; abnormal calcium flux;
 KW epilepsy; coronary artery disease; Tangier's disease; atherosclerosis;
 KW familial high-density lipoprotein deficiency; fatty liver disease;
 KW atherosclerosis; diabetes; insulin resistance; obesity; drug screening;
 KW alcoholism; retinal degeneration; hypertension; vascular disease.
 XX
 OS Homo sapiens.
 XX
 PN WO200153490-A1.
 XX
 PD 26-JUL-2001.
 XX
 PF 23-JAN-2001; 2001WO-US002191.
 XX
 PR 24-JAN-2000; 2000US-0177889P.
 PR 30-JUN-2000; 2000US-0215405P.
 XX
 PA (WARN) WARNER LAMBERT CO.
 XX
 PI Johns MA, Tafuri SR, Wang M;
 XX
 DR WPI; 2001-442259/47.
 XX
 PT New Human PD-ABC DNA molecules and proteins for diagnosis and treatment
 PT of dyslipidemia, epilepsy and diseases related to abnormal calcium flux.
 XX
 PS Disclosure; Page 40; 77pp; English.
 XX
 CC The sequence represents a splice site within a DNA molecule encoding

CC human PD-ATP-binding cassette (PD-ABC) protein. PD-ABC maps to chromosome
 CC 19p13.3 and is expressed in various tissues including spleen, thymus,
 CC peripheral blood leukocytes, bone marrow and lymph nodes. The PD-ABC DNA
 CC molecules and proteins are used to diagnose and treat cardiovascular
 CC disorders, inflammatory disorders, dyslipidaemia, epilepsy, diseases
 CC related to abnormal calcium flux, coronary artery disease, Tangier's
 CC disease, familial high-density lipoprotein deficiency, atherosclerosis,
 CC diabetes, fatty liver disease, insulin resistance, obesity, alcoholism,
 CC retinal degeneration, hypertension and vascular disease. The sequences
 CC are also used in drug screening assays

XX Sequence 20 BP; 3 A; 9 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1221 GGAGGCCATCCCTGAGGAGA 1240

Db 20 GGAGGCCATCCCTGGAGGTGA 1

RESULT 1254

AAS21703
 ID AAS21703 standard; DNA; 20 BP.

XX AAS21703;

DT 21-NOV-2001 (first entry)

DE Mouse Survivin antisense oligonucleotide #6.

XX Survivin; human; mouse; cytostatic; antisense oligonucleotide;
 KW hyperproliferative condition; cancer; apoptosis; cytokinesis; ss.

OS Mus musculus.

OS Synthetic.

XX WO200157059-A1.

PN 09-AUG-2001.

PF 30-JAN-2001; 2001WO-US002939.

XX 02-FEB-2000; 2000US-00496694.

PR (ISIS-) ISIS PHARM INC.

XX Bennett CF, Ackermann EJ, Swayze EE, Cowser LM;

XX WPI; 2001-488863/53.

XX Novel antisense compounds for modulating the expression of Survivin and
 PT treatment of cancer.

PS Example 18; Page 60; 120pp; English.

XX The invention relates to antisense oligonucleotides targeted to a nucleic
 CC acid molecule encoding human Survivin, where the antisense
 CC oligonucleotide inhibits the expression of human Survivin. These
 CC antisense oligonucleotides are used in the treatment of an animal
 CC suffering from a disease or condition associated with Survivin, e.g. a
 CC hyperproliferative condition such as cancer, and comprises administering
 CC a therapeutically or prophylactically effective amount of the antisense
 CC oligonucleotide so that expression of Survivin is inhibited. The
 CC oligonucleotides can also be used to treat a human suffering from a
 CC disease or condition characterised by a reduction in apoptosis comprising
 CC administering the antisense oligonucleotide to a human. In addition, the
 CC antisense oligonucleotide and a cytotoxic chemotherapeutic agent e.g.
 CC taxol or cisplatin, can be used to modulate apoptosis, cytokinesis or the
 CC cell cycle, or inhibit the proliferation in a cancer cell by contacting
 CC the cell with the antisense oligonucleotide. AAS21521-AAS21768 represent
 CC Survivin nucleic acids, and antisense oligonucleotides targeted to

CC Survivin, used in the method of the invention
 XX Sequence 20 BP; 8 A; 6 C; 5 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 60 CAAGATGGCGCAGCAGG 79

Db 1 CAAGAGCACTCAAGCAGG 20

RESULT 1255

AAL42532
 ID AAL42532 standard; DNA; 20 BP.

XX AAL42532;

DT 28-JUN-2002 (first entry)

DE Exon 2 fragment 1 from a gene on human chromosome 21.

XX Human; gene; ds; primer design system; DNA analysis; exon 2;
 KW chromosome 21.

XX Homo sapiens.

XX EP1136932-A1.

PN 26-SEP-2001.

XX 20-MAR-2000; 2000EP-00302249.

XX 20-MAR-2000; 2000EP-00302249.

XX (HITA) HITACHI LTD.

XX Nakae H, Ihara S;

XX WPI; 2001-640409/74.

XX New primer design system, useful for designing primers for various genes
 PT of interest, especially useful in DNA analysis techniques.

PS Disclosure; Fig 6; 29pp; English.

XX The invention relates to a primer design system. The primer design system
 CC comprises a receiver for obtaining data on several DNA sequences from a
 CC database, and a control unit for controlling the system. The primer
 CC design system of the invention is useful for designing primers for
 CC various genes of interest. The primer design system is particularly
 CC useful in DNA analysis techniques. The present DNA sequence represents a
 CC fragment of exon 2 from a gene on human chromosome 21

XX Sequence 20 BP; 9 A; 5 C; 6 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1415 AAGACCCAGGACGAGGAGA 1434

Db 1 AAGACCCAGGACGAGGAGA 20

RESULT 1256

ABZ72238/C
 ID ABZ72238 standard; DNA; 20 BP.

XX ABZ72238;

DT 03-APR-2003 (first entry)


```

XX DE Gene 216 SSCP sequencing primer SEQ ID NO 210.
XX DE Human; Gene 216; chromosome 20p13-p12; antiasthmatic; anorectic;
XX KW antiinflammatory; gastrointestinal; gene therapy; vaccine; asthma;
XX KW obesity; inflammatory bowel disease; primer; ss.
XX OS Synthetic.
XX FN WO200178894-A2.
XX PD 25-OCT-2001.
XX PF 13-APR-2001; 2001WO-US012245.
XX PR 13-APR-2000; 2000US-00548797.
XX PA (GENO-) GENOME THERAPEUTICS CORP.
XX PI Keith T;
XX DR WPI; 2001-639428/73.
XX PT Isolated genes (Gene 216) from human chromosome 20p13-p12 and the
XX PT proteins they encode, useful for the prevention, diagnosis and treatment
XX PT of asthma, obesity and inflammatory bowel disease.
XX PS Example 10; Page 150; 520pp; English.
XX CC The invention relates to isolated genes (Gene 216) from human chromosome
XX CC 20p13-p12 and the proteins they encode. The nucleic acids and proteins
XX CC may be used in the prevention, diagnosis and treatment of diseases
XX CC associated with inappropriate gene 216 expression. For example, the
XX CC nucleic acids (or vectors) and proteins may be used to treat disorders
XX CC associated with decreased expression by rectifying mutations or deletions
XX CC in a patient's genome that affect the activity of gene 216 by expressing
XX CC inactive proteins or to supplement the patients own production of gene
XX CC 216 proteins. Additionally, the nucleic acids may be used to produce the
XX CC secreted gene 216 protein, by inserting the nucleic acids into a host
XX CC cell and culturing the cell to express the protein. The nucleic acids and
XX CC complementary sequences may also be used as DNA probes in diagnostic
XX CC assays to detect and quantitate the presence of similar nucleic acid
XX CC sequences in samples and therefore which patients may be in need of
XX CC restorative therapy. The Gene 216 protein may also be used as antigens in
XX CC the production of antibodies against Gene 216 and in assays to identify
XX CC modulators of Gene 216 expression and activity. The anti-Gene 216
XX CC antibodies and antagonists may also be used to down regulate expression
XX CC and activity. The anti-Gene 216 antibodies may also be used as diagnostic
XX CC agents for detecting the presence of Gene 216 proteins in samples (e.g.
XX CC by enzyme linked immunosorbant assay or ELISA). Disorders that may be
XX CC prevented, diagnosed and/or treated by the above methods include, for
XX CC example asthma, obesity and inflammatory bowel disease. The present
XX CC sequence is that of a Gene 216 related primer used in examples of the
XX CC invention. The primers are used in the physical mapping of the gene
XX CC (ABZ72067-ABZ72088), polymorphism identification using single strand
XX CC conformational polymorphism (SSCP) analysis (ABZ72091-ABZ72184),
XX CC sequencing (ABZ72185-ABZ72268) and genotyping (ABZ72317-ABZ72362)
XX CC
XX CC Sequence 20 BP; 3 A; 7 C; 5 G; 5 T; 0 U; 0 Other;
XX CC
XX CC Query Match 0.7%; Score 13.6; DB 1; Length 20;
XX CC Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX CC Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX CC
XX CC 955 CTGGGAGCGGTGGTTACAC 974
XX CC 20 CTGGGAGTCGGTAGCAACAC 1
XX CC
XX CC RESULT 1257
XX CC ID ABZ72123 standard; DNA; 20 BP.
XX CC

```

```

AC ABZ72123;
XX 03-APR-2003 (first entry)
XX Gene 216 SSCP detection primer SEQ ID NO 95.
XX Human; Gene 216; chromosome 20p13-p12; antiasthmatic; anorectic;
XX KW antiinflammatory; gastrointestinal; gene therapy; vaccine; asthma;
XX KW obesity; inflammatory bowel disease; primer; ss.
XX OS Synthetic.
XX FN WO200178894-A2.
XX PD 25-OCT-2001.
XX PF 13-APR-2001; 2001WO-US012245.
XX PR 13-APR-2000; 2000US-00548797.
XX PA (GENO-) GENOME THERAPEUTICS CORP.
XX PI Keith T;
XX DR WPI; 2001-639428/73.
XX PT Isolated genes (Gene 216) from human chromosome 20p13-p12 and the
XX PT proteins they encode, useful for the prevention, diagnosis and treatment
XX PT of asthma, obesity and inflammatory bowel disease.
XX PS Example 10; Page 149; 520pp; English.
XX CC The invention relates to isolated genes (Gene 216) from human chromosome
XX CC 20p13-p12 and the proteins they encode. The nucleic acids and proteins
XX CC may be used in the prevention, diagnosis and treatment of diseases
XX CC associated with inappropriate gene 216 expression. For example, the
XX CC nucleic acids (or vectors) and proteins may be used to treat disorders
XX CC associated with decreased expression by rectifying mutations or deletions
XX CC in a patient's genome that affect the activity of gene 216 by expressing
XX CC inactive proteins or to supplement the patients own production of gene
XX CC 216 proteins. Additionally, the nucleic acids may be used to produce the
XX CC secreted gene 216 protein, by inserting the nucleic acids into a host
XX CC cell and culturing the cell to express the protein. The nucleic acids and
XX CC complementary sequences may also be used as DNA probes in diagnostic
XX CC assays to detect and quantitate the presence of similar nucleic acid
XX CC sequences in samples and therefore which patients may be in need of
XX CC restorative therapy. The Gene 216 protein may also be used as antigens in
XX CC the production of antibodies against Gene 216 and in assays to identify
XX CC modulators of Gene 216 expression and activity. The anti-Gene 216
XX CC antibodies and antagonists may also be used to down regulate expression
XX CC and activity. The anti-Gene 216 antibodies may also be used as diagnostic
XX CC agents for detecting the presence of Gene 216 proteins in samples (e.g.
XX CC by enzyme linked immunosorbant assay or ELISA). Disorders that may be
XX CC prevented, diagnosed and/or treated by the above methods include, for
XX CC example asthma, obesity and inflammatory bowel disease. The present
XX CC sequence is that of a Gene 216 related primer used in examples of the
XX CC invention. The primers are used in the physical mapping of the gene
XX CC (ABZ72067-ABZ72088), polymorphism identification using single strand
XX CC conformational polymorphism (SSCP) analysis (ABZ72091-ABZ72184),
XX CC sequencing (ABZ72185-ABZ72268) and genotyping (ABZ72317-ABZ72362)
XX CC
XX CC Sequence 20 BP; 3 A; 7 C; 5 G; 5 T; 0 U; 0 Other;
XX CC
XX CC Query Match 0.7%; Score 13.6; DB 1; Length 20;
XX CC Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX CC Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX CC
XX CC 955 CTGGGAGCGGTGGTTACAC 974
XX CC 20 CTGGGAGTCGGTAGCAACAC 1
XX CC
XX CC RESULT 1258
XX CC

```

AAAD12363
ID AAD12363 standard; DNA; 20 BP.
AC AAD12363;
XX
XX 25-SEP-2001 (first entry)
XX
XX Human caspase 8 mRNA antisense compound ISIS 107641.
XX
XX Caspase 8; infection; inflammation; tumour; research reagent; cytostatic;
KW gene therapy; antisense; human; phosphorothioate; ss.
XX
XX Homo sapiens.
OS Synthetic.
OS
FH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone"
FT modified_base 1..5
FT /tag= b
FT /mod_base= OTHER
FT modified_base 2
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT /tag= d
FT /mod_base= m5c
FT modified_base 3
FT /tag= e
FT /mod_base= m5c
FT modified_base 10
FT /tag= f
FT /mod_base= m5c
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX
XX US6258600-B1.
PN
XX
XX 10-JUL-2001.
XX
XX 19-JAN-2000; 2000US-00487445.
XX
XX 19-JAN-2000; 2000US-00487445.
PR
XX
XX (ISIS-) ISIS PHARM INC.
PA
XX
XX Zhang H, Cowsett LM;
PI
XX
XX WPI; 2001-432165/46.
DR
XX
XX New antisense compounds capable of modulating expression of caspase 8 for
FT the diagnoses, prophylaxis and treatment of diseases associated with
FT expression of caspase 8, e.g. inflammation and tumor formation.
XX
XX Claim 1; Col 43-44; 56pp; English.
PS
XX
XX The invention relates to antisense compounds which inhibit the expression
CC of human caspase 8. The antisense compound is useful for diagnosing and
CC treating diseases associated with the expression of caspase 8 and for
CC prophylaxis e.g. to prevent or delay infection, inflammation or tumour
CC formation, and as a research reagent. The present sequence is an
CC antisense compound targetted to human caspase 8 mRNA
XX
XX Sequence 20 BP; 4 A; 3 C; 5 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 2024 TCCAGTTTCCTTTGAGAT 2043
|| ||||| | ||| |||||

Db 1 TCCAGTTTCCTTTGAGAT 20
RESULT 1259
AAH27692/c
ID AAH27692 standard; DNA; 20 BP.
XX
XX AAH27692;
AC
XX
XX 13-AUG-2001 (first entry)
XX
XX Human bcl-x antisense chimeric oligonucleotide SEQ ID 35.
XX
XX Antisense oligonucleotide; bcl-x; human; apoptosis; inflammation; cancer;
KW glioblastoma; leukaemia; autoimmune disorder; Alzheimer's disease;
KW neurodegenerative disorder; AIDS; Parkinson's disease; phosphorothioate;
KW ss.
XX
XX Homo sapiens.
OS Synthetic.
OS
XX Key Location/Qualifiers
FT modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /label= Phosphorothioate internucleotide linkage
FT modified_base 1..5
FT /tag= b
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl (2'-MOE) nucleotides, where
FT cytidine residues are 5-methylcytidines"
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyl (2'-MOE) nucleotides, where
FT cytidine residues are 5-methylcytidines"
XX
XX US2001007025-A1.
PN
XX
XX 05-JUL-2001.
XX
XX 12-DEC-2000; 2000US-00734846.
XX
XX 07-OCT-1998; 98US-00167921.
PR
XX 26-MAR-1999; 99US-00277020.
PR
XX 02-JUN-1999; 99US-00323743.
XX
XX (BENN/) BENNETT C F.
PA (DEAN/) DEAN N M.
PA (MONI/) MONIA B P.
PA (NICK/) NICKOLOFF B J.
PA (ZHAN/) ZHANG Q Q.
XX
XX Bennett CF, Dean NM, Monia BP, Nickoloff BJ, Zhang QQ;
PI
XX
XX WPI; 2001-397228/42.
DR
XX
XX Antisense compound, 8 to 30 nucleobases in length, targeted to a nucleic
PT acid molecule encoding a human bcl-x, useful for preventing or treating
PT tumor formation, infection or inflammation.
XX
XX Example 16; Page 17; 47pp; English.
PS
XX This invention relates to antisense oligonucleotides which are between 8
CC and 30 nucleobases in length and are targeted to a nucleotide sequence
CC encoding human bcl-x. Human Bcl-x functions as a bcl-2-independent
CC regulator of apoptosis. The invention includes a method of inhibiting the
CC expression of bcl-x in human cells or tissues through antisense
CC inhibition by the antisense oligonucleotides. An antisense compound
CC containing the oligonucleotide together with a chemotherapeutic agent is
CC useful for preventing or treating tumour formation. The antisense
CC compound is also useful for treating or preventing infection or
CC inflammation. Cancer particularly glioblastoma and leukaemia, autoimmune

```
CC disorders and viral infections, AIDS, neurodegenerative disorders like
CC Alzheimer's or Parkinson's diseases may be treated using compounds
CC containing the antisense oligonucleotides. The present sequence
CC represents an antisense oligonucleotide targeted against a region of the
CC human bcl-x gene
XX
SQ Sequence 20 BP; 8 A; 4 C; 3 G; 5 T; 0 U; 0 Other;

Query Match          0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1763 GATACCTTTTATGCAACCATTA 1782
DB 20 GATACCTTTTGTGGAACCTCTA 1

RESULT 1260
AAH80628
ID AAH80628 standard; cDNA; 20 BP.
XX
AC AAH80628;
XX
DT 11-SEP-2003 (revised)
DT 19-SEP-2001 (first entry)
XX
DE Oligonucleotide hybridisation potential related cDNA SEQ ID NO: 592.
XX
KW Nucleic acid hybridisation; probe; primer; human; rabbit; HIV-1;
KW disease diagnosis; ss.
XX
OS Human immunodeficiency virus 1.
XX
FN USG251588-B1.
XX
PD 26-JUN-2001.
XX
PF 10-FEB-1998; 98US-00021701.
XX
PR 10-FEB-1998; 98US-00021701.
XX
PA (AGIL-) AGILENT TECHNOLOGIES INC.
XX
PI Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;
XX
DR WPI; 2001-424456/45.
XX
FN USG251588-B1.
XX
PD 26-JUN-2001.
XX
PF 10-FEB-1998; 98US-00021701.
XX
PR 10-FEB-1998; 98US-00021701.
XX
PA (AGIL-) AGILENT TECHNOLOGIES INC.
XX
PI Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;
XX
DR WPI; 2001-424456/45.
XX
PT Predicting the potential of an oligonucleotide to hybridize to a target
PT nucleotide sequence, useful for evaluating oligonucleotide probe
PT sequences, by identifying a oligonucleotides based on the evaluation of
PT parameters.
XX
PS Example 2; Col 67; 342pp; English.
XX
CC The present invention describes a method for predicting the potential of
CC an oligonucleotide to hybridise to a (complementary) target nucleotide
CC sequence, involving identifying a subset of oligonucleotides within the
CC predetermined number of unique oligonucleotides based on the evaluation
CC of the parameter. Oligonucleotides in the subset are identified that are
CC clustered along a region of the nucleotide sequence that is hybridisable
CC to the target nucleotide sequence. This is useful for evaluating
CC oligonucleotide probe sequences. The present sequence is an
CC oligonucleotide described in the exemplification of the invention.
CC (Updated on 11-SEP-2003 to standardise OS field)
XX
SQ Sequence 20 BP; 7 A; 6 C; 2 G; 5 T; 0 U; 0 Other;

Query Match          0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1834 CCTTATTGACATTTCTAGAA 1853
DB 11-SEP-2003 (revised)
DB 19-SEP-2001 (first entry)
XX
DE Oligonucleotide hybridisation potential related cDNA SEQ ID NO: 593.
XX
```

```
Db 1 CCTAATTGAACCTCCAGAA 20

RESULT 1261
AAH80185
ID AAH80185 standard; cDNA; 20 BP.
XX
AC AAH80185;
XX
DT 11-SEP-2003 (revised)
DT 19-SEP-2001 (first entry)
XX
DE Oligonucleotide hybridisation potential related cDNA SEQ ID NO: 149.
XX
KW Nucleic acid hybridisation; probe; primer; human; rabbit; HIV-1;
KW disease diagnosis; ss.
XX
OS Human immunodeficiency virus 1.
XX
FN USG251588-B1.
XX
PD 26-JUN-2001.
XX
PF 10-FEB-1998; 98US-00021701.
XX
PR 10-FEB-1998; 98US-00021701.
XX
PA (AGIL-) AGILENT TECHNOLOGIES INC.
XX
PI Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;
XX
DR WPI; 2001-424456/45.
XX
PT Predicting the potential of an oligonucleotide to hybridize to a target
PT nucleotide sequence, useful for evaluating oligonucleotide probe
PT sequences, by identifying a oligonucleotides based on the evaluation of
PT parameters.
XX
PS Example 2; Col 55; 342pp; English.
XX
CC The present invention describes a method for predicting the potential of
CC an oligonucleotide to hybridise to a (complementary) target nucleotide
CC sequence, involving identifying a subset of oligonucleotides within the
CC predetermined number of unique oligonucleotides based on the evaluation
CC of the parameter. Oligonucleotides in the subset are identified that are
CC clustered along a region of the nucleotide sequence that is hybridisable
CC to the target nucleotide sequence. This is useful for evaluating
CC oligonucleotide probe sequences. The present sequence is an
CC oligonucleotide described in the exemplification of the invention.
CC (Updated on 11-SEP-2003 to standardise OS field)
XX
SQ Sequence 20 BP; 5 A; 3 C; 5 G; 7 T; 0 U; 0 Other;

Query Match          0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 650 TGTCCTTTTCATTAAGTATGGA 669
DB 1 TGTCCTTTTATCAGGATGGA 20

RESULT 1262
AAH80629
ID AAH80629 standard; cDNA; 20 BP.
XX
AC AAH80629;
XX
DT 11-SEP-2003 (revised)
DT 19-SEP-2001 (first entry)
XX
DE Oligonucleotide hybridisation potential related cDNA SEQ ID NO: 593.
XX
```

KW Nucleic acid hybridisation; probe; primer; human; rabbit; HIV-1;
 KW disease diagnosis; ss.
 XX Human immunodeficiency virus 1.
 XX US6251588-B1.
 XX PD 26-JUN-2001.
 XX PF 10-FEB-1998; 98US-00021701.
 XX PR 10-FEB-1998; 98US-00021701.
 XX (AGIL-) AGILENT TECHNOLOGIES INC.
 XX Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;
 XX WPI; 2001-424456/45.
 XX Predicting the potential of an oligonucleotide to hybridize to a target
 PT nucleotide sequence, useful for evaluating oligonucleotide probe
 PT sequences, by identifying a oligonucleotides based on the evaluation of
 PT parameters.
 XX Example 2; Col 67; 342pp; English.
 XX The present invention describes a method for predicting the potential of
 CC an oligonucleotide to hybridise to a (complementary) target nucleotide
 CC sequence, involving identifying a subset of oligonucleotides within the
 CC predetermined number of unique oligonucleotides based on the evaluation
 CC of the parameter. Oligonucleotides in the subset are identified that are
 CC clustered along a region of the nucleotide sequence that is hybridisable
 CC to the target nucleotide sequence. This is useful for evaluating
 CC oligonucleotide probe sequences. The present sequence is an
 CC oligonucleotide described in the exemplification of the invention.
 CC (Updated on 11-SEP-2003 to standardise OS field)
 XX Sequence 20 BP; 7 A; 5 C; 3 G; 5 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1835 CTTATTGACATCTTAGAAG 1854
 Db 1 CTTATTGAACTCCCAAGAAG 20
 RESULT 1263
 AAH80186
 ID AAH80186 standard; cDNA; 20 BP.
 AC AAH80186;
 XX 11-SEP-2003 (revised)
 DT 19-SEP-2001 (first entry)
 DE Oligonucleotide hybridisation potential related cDNA SEQ ID NO: 150.
 XX Nucleic acid hybridisation; probe; primer; human; rabbit; HIV-1;
 KW disease diagnosis; ss.
 XX Human immunodeficiency virus 1.
 XX US6251588-B1.
 XX PD 26-JUN-2001.
 XX PF 10-FEB-1998; 98US-00021701.
 XX PR 10-FEB-1998; 98US-00021701.
 XX (AGIL-) AGILENT TECHNOLOGIES INC.
 PA

XX Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;
 XX WPI; 2001-424456/45.
 XX Predicting the potential of an oligonucleotide to hybridize to a target
 PT nucleotide sequence, useful for evaluating oligonucleotide probe
 PT sequences, by identifying a oligonucleotides based on the evaluation of
 PT parameters.
 XX Example 2; Col 55; 342pp; English.
 XX The present invention describes a method for predicting the potential of
 CC an oligonucleotide to hybridise to a (complementary) target nucleotide
 CC sequence, involving identifying a subset of oligonucleotides within the
 CC predetermined number of unique oligonucleotides based on the evaluation
 CC of the parameter. Oligonucleotides in the subset are identified that are
 CC clustered along a region of the nucleotide sequence that is hybridisable
 CC to the target nucleotide sequence. This is useful for evaluating
 CC oligonucleotide probe sequences. The present sequence is an
 CC oligonucleotide described in the exemplification of the invention.
 CC (Updated on 11-SEP-2003 to standardise OS field)
 XX Sequence 20 BP; 5 A; 3 C; 6 G; 6 T; 0 U; 0 Other;
 SQ
 Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 651 GTCCTTTCATAGTATGGAG 670
 Db 1 GTCCTTTCATAGTATGGAG 20
 RESULT 1264
 ABA82490/C
 ID ABA82490 standard; DNA; 20 BP.
 AC ABA82490;
 XX 25-JAN-2002 (first entry)
 DT
 DE Zmax1 gene region physical map preparation STS marker #449.
 XX Human; high bone mass; HBM gene; Zmax1 gene; chromosome 11; 11q13.3;
 KW sequence tagged site; STS; osteoporosis; osteopathic; gene therapy;
 KW antisense therapy; vaccine; bone disorder; Paget's disease; adapter;
 KW sclerostosis; osteomalacia; fibrous dysplasia; PCR primer; linker; ss.
 XX Homo sapiens.
 OS Synthetic.
 OS WO200177327-A1.
 XX 18-OCT-2001.
 XX 21-JUN-2000; 2000WO-US016951.
 XX 05-APR-2000; 2000US-00543771.
 XX 05-APR-2000; 2000US-00544398.
 XX (GENO-) GENOME THERAPEUTICS CORP.
 XX Carulli JP, Little RD, Recker RR, Johnson ML;
 XX WPI; 2001-657171/75.
 XX New high bone mass (HBM) and Zmax1 genes and proteins useful for
 PT modulating bone mass for the treatment of e.g. osteoporosis.
 XX Disclosure; Page 36; 443pp; English.
 XX The present invention describes the human Zmax1 gene and the high bone

CC mass (HBM) gene, which are found on chromosome 11q13.3. The Zmax1 and HBM
 CC genes have osteoplastic activities. The genes can be used in gene therapy,
 CC antisense therapy and in the production of vaccines. They can be used in
 CC the diagnosis and treatment of bone disorders including osteoporosis,
 CC Paget's disease, sclerostosis, osteomalacia and fibrous dysplasia.
 CC ABA82038 to ABA82700 and AAG68168 to AAG68193 represent sequences used in
 CC the exemplification of the present invention
 XX
 SQ Sequence 20 BP; 8 A; 4 C; 7 G; 1 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1273 CCATCTCGATCTGCTCCTC 1292
 |||||
 Db 20 CGCTTGCGATCTCTCCTC 1
 RESULT 1265
 ABA81766
 ID ABA81766 standard; DNA; 20 BP.
 XX
 AC ABA81766;
 XX
 DT 25-JAN-2002 (first entry)
 XX
 DE PCR primer KP235.
 XX
 KW Aldehyde-dehydrogenase; enzyme; phenanthrene; anthracene; PCR primer;
 KW aromatic dihydrodiol dehydrogenase; aromatic diol oxygenase;
 KW hydratase-aldehyde; ss.
 XX
 OS Nocardioides sp. KP7.
 XX
 PN JP2001245662-A.
 XX
 PD 11-SEP-2001.
 XX
 PF 03-MAR-2000; 2000JP-00059523.
 XX
 PR 03-MAR-2000; 2000JP-00059523.
 XX
 PA (KAIY-) KAIYO BIOTECHNOLOGY KENKYUSHO KK.
 XX
 DR WPI; 2002-002935/01.
 XX
 PT Genes and proteins involved in the upstream of the pathway of degradation
 PT of a polycyclic aromatic compound.
 XX
 PS Example 4; Page 7; 47pp; Japanese.
 CC
 CC The present invention relates to coding sequences for proteins such as
 CC aromatic dihydrodiol dehydrogenase, aromatic diol oxygenase, hydratase-
 CC aldehyde and aldehyde-dehydrogenase (ABA01198-ABA01201 and AAM52344-
 CC AAM52347), which are involved in the degradation of polycyclic aromatic
 CC compounds. The enzymes are useful as reagents for converting the
 CC metabolite intermediates of polycyclic aromatic compounds such as
 CC phenanthrene and anthracene. The present sequence is a PCR primer, which
 CC was used in an example from the present invention
 XX
 SQ Sequence 20 BP; 4 A; 6 C; 8 G; 2 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 21 GGGCGGACCGACCGACTGC 40
 |||||
 Db 1 GGGCGGACCGATCTACGCAC 20
 RESULT 1266

AAH43750
 ID AAH43750 standard; cDNA; 20 BP.
 XX
 AC AAH43750;
 XX
 DT 30-JAN-2002 (first entry)
 XX
 DE E. coli detection primer B-11375.
 XX
 KW Escherichia; Shigella; cancer; tumour; probe; colon; stomach; amplify;
 KW gastrointestinal; colorectal; detection; food; water; primer; PCR;
 KW cellular instability; infection; pre-malignant change; sanitation;
 KW histological analysis; antisense therapy; polymerase chain reaction; ss.
 XX
 OS Synthetic.
 XX
 PN WO200179545-A1.
 XX
 PD 25-OCT-2001.
 XX
 PF 17-APR-2001; 2001WO-SG0000067.
 XX
 PR 18-APR-2000; 2000SG-00002150.
 XX
 PA (UYSI-) UNIV SINGAPORE NAT.
 XX
 PI Ng WC;
 XX
 DR WPI; 2002-026038/03.
 XX
 PT Use of Escherichia coli or Shigella species-specific nucleotide sequences
 PT for testing food, water samples, genetic, cellular instability and
 PT detecting cancer e.g. stomach, colon, colorectal, gastrointestinal
 PT cancer.
 XX
 PS Claim 1; Page 56; 119pp; English.
 CC
 CC The sequences given in AAH43720-57 are primers which were derived from
 CC the claimed probe of the invention, formula I, which extends from
 CC nucleotide position 246 of AAH43717, including AAH43718 to position 6693
 CC of AAH43719. This primer maps to position 11375-11356 of AAH43718 and
 CC identifies the b1012 gene. The nucleotide sequences of the invention are
 CC specific to E. coli and/or Shigella species and/or related microorganism
 CC present mainly in the nucleus of cancer cells and in the normal cells
 CC adjacent to cancer cells, and may be used for identifying cancer or a
 CC tumour or a predisposition to development of the same and/or in
 CC manufacture of a molecular probe for identifying E. coli and/or Shigella
 CC species. The nucleotide sequences are used especially for the
 CC identification of colon, stomach, gastrointestinal or colorectal cancer
 CC or tumour or a predisposition to development of these conditions. They
 CC may also be used for detecting the presence of E. coli or Shigella
 CC species or related microorganisms in a sample, e.g. food, water, semi-
 CC solids or semi-liquid material, mammalian tissue, or extract or its cells
 CC or a nucleic acid preparation from the tissue, extract or cells from a
 CC patient suffering from cancer or cellular instability or gastrointestinal
 CC infection, or a patient at risk of cancer or cellular instability. The
 CC nucleic acid sequences of the invention may also be useful for
 CC identifying nucleotide sequences or their expressed polypeptides capable
 CC of inducing or facilitating abnormal cell growth or physiology associated
 CC with cancer or cellular instability or a predisposition to the
 CC development of the same and for testing and selecting sequences specific
 CC to E. coli or Shigella species and/or related microorganism in a sample.
 CC They are also useful in recognizing early cellular DNA changes and pre-
 CC malignant changes associated with any one or more members of the
 CC Escherichiae family in the colonic epithelium and malignant colonic
 CC tumours residing in other tissues. Nucleic acid fragments of formula I
 CC are useful in diagnostic imaging, to identify the level of food and water
 CC sanitation, histological analysis, in monitoring the level/depth of
 CC infection, in studying the association of the presence of the sequences
 CC in gastrointestinal conditions or other clinical conditions and in
 CC therapy, for e.g. the polynucleotides may be useful alone in therapy as
 CC antisense DNA or RNA, and the metabolic pathway that the sequence or its
 CC nearby sequence encode can be utilized to activate prodrugs. The E. coli

CC of the invention is useful in gene therapy. This polynucleotide sequence
CC represents a PCR primer for amplifying a FANCD exon relating to the
CC invention
XX
SQ Sequence 20 BP; 2 A; 5 C; 6 G; 7 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1638 GACAGAAACCAAGGCCCGA 1657
DB 20 GACAGTCACCAAGGCACTGA 1
RESULT 1268
ABK51980/c
ID ABK51980 standard; DNA; 20 BP.
XX
XX ABK51980;
AC
XX
XX 27-AUG-2002 (first entry)
DT
XX
XX Primer #5 for equine CgA cDNA.
DE
XX
XX Equine; horse; chromogranin A; CgA; primer; ss.
KW
XX
XX Equus sp.
OS
XX
XX JP2002088100-A.
PN
XX
XX 27-MAR-2002.
PD
XX
XX 14-SEP-2000; 2000JP-00279724.
PF
XX
XX 14-SEP-2000; 2000JP-00279724.
PR
XX
XX (YANA-) YANAIHARA KENKYUSHO KK.
PA
XX
XX WPI; 2002-457738/49.
DR
XX
XX An antigen, useful for producing an antibody for measurement and
PT detection of equine chromogranin A.
PT
XX
XX Disclosure; Fig 1; 10pp; Japanese.
PS
XX
XX The present invention relates to antigens useful for preparing an
CC antibody having specific reactivity to equine (horse) chromogranin A
CC (CgA). Such an antibody is prepared by immunising a novel antigen to a
CC warm-blooded animal other than human and horse, and measuring and/or
CC detecting specifically equine CgA and its related substance by carrying
CC out an immunoassay using the antibody. The present sequence represents a
CC primer for equine CgA cDNA
XX
SQ Sequence 20 BP; 1 A; 10 C; 1 G; 8 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1431 GAAAGAAGTCACCGAAGAGG 1450
DB 20 GAAGGAGTGCAGAGAGG 1
RESULT 1269
AAD41753/c
ID AAD41753 standard; DNA; 20 BP.
XX
XX AAD41753;
AC
XX
XX 30-OCT-2002 (first entry)
DT
XX

CC or Shigella species-specific nucleotide sequences useful as molecular
CC probes to provide an alternative to microbiological and biochemical
CC assays which are less specific, sensitive, reliable, often required for
CC pure cultures and are more time consuming
XX
SQ Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1138 CTGAGACAGATCAACAGCG 1157
DB 1 CTGTCATGATCAAACTGCG 20
RESULT 1267
ABT13261/c
ID ABT13261 standard; DNA; 20 BP.
XX
XX ABT13261;
AC
XX
XX 30-JAN-2003 (first entry)
DT
XX
XX Fanconi anaemia FANCD exon amplifying PCR primer SEQ ID No 164.
DE
XX
XX Cytostatic; dermatological; vasotropic; anti-anaemic; FA pathway defect;
KW Fanconi anaemia protein complex; FANCD; DNA repair; Cockayne's syndrome;
KW cell cycle abnormality; Fanconi anaemia; ataxia telangiectasia; cancer;
KW Bloom's syndrome; Hereditary non-polyposis colon cancer; gene therapy;
KW Xeroderma pigmentosum; PCR; primer; ss.
XX
XX Unidentified.
OS
XX
XX WQ200236761-A2.
PN
XX
XX 10-MAY-2002.
PD
XX
XX 02-NOV-2001; 2001WO-US045561.
PF
XX
XX 03-NOV-2000; 2000US-0245756P.
PR
XX
XX (DAND) DANA FARBER CANCER INST INC.
PA
XX
XX D'andrea AD, Taniguchi T, Timmers C, Grompe M;
PI WPI; 2002-519251/55.
DR
XX
XX Novel isolated Fanconi anemia protein complex polypeptide, termed FANCD2,
XX useful for treating Fanconi anemia pathway defect in cell target or for
XX treating patient with defective FANCD2 gene.
PT
XX
XX Claim 8; Page 56; 103pp; English.
PS
XX
XX The invention relates to an isolated Fanconi anaemia protein complex
CC (FANCD2) polypeptide. The FANCD2 protein comprises a sequence of 1472
CC amino acids fully defined in the specification, its 90% identical
CC sequence, a sequence encoded by a polynucleotide that is at least 90%
CC identical to sequences given in specification such as a 5127 base pair
CC sequence, or a fragment which is at least 50 amino acids in length. The
CC FANCD2 protein is useful for treating an FA pathway defect in a cell
CC target or for treating a patient with a defective FANCD2 gene. The FANCD2
CC gene is useful for making a recombinant expression vector. The FANCD2
CC protein and its gene are useful as a novel target for therapeutic
CC development, and in diagnostic test and screening assays for diseases
CC associated with DNA repair and cell cycle abnormalities such as Fanconi
CC anaemia, Bloom's syndrome, Cockayne's syndrome, Hereditary non-polyposis
CC colon cancer, ataxia telangiectasia and Xeroderma pigmentosum. The FANCD2
CC gene is useful in producing probes and primers for screening patients in
CC genetic based test, for diagnosing Fanconi anaemia and cancer, for
CC preparing an experimental mouse model for use in screening new
CC therapeutics for treating conditions involving defective DNA repair, and
CC in gene therapy methods. A recombinant vector containing the FANCD2 gene

DE Human RECQL2 antisense oligonucleotide, ISIS #137533.
XX Antisense; RECQL2; Bloom's disorder; prophylaxis; infection; tumour;
XX inflammation; therapy; human; phosphorothioate; ss.
XX Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT FT /*tag= a
FT FT /mod_base= OTHER
FT FT /note= "Phosphorothioate backbone"
FT modified_base 1..5
FT FT /*tag= b
FT FT /mod_base= OTHER
FT modified_base 3
FT FT /note= "2'-methoxyethyl nucleotides"
FT FT /*tag= d
FT FT /mod_base= m5c
FT FT 6
FT FT /*tag= e
FT FT /mod_base= m5c
FT modified_base 9..10
FT FT /*tag= f
FT FT /mod_base= m5c
FT modified_base 16..20
FT FT /*tag= c
FT FT /mod_base= OTHER
FT modified_base 16..17
FT FT /note= "2'-methoxyethyl nucleotides"
FT FT /*tag= g
FT FT /mod_base= m5c
FT modified_base 19
FT FT /*tag= h
FT FT /mod_base= m5c
XX
XX US6399378-B1.
XX
XX 04-JUN-2002.
XX
XX 01-MAR-2001; 2001US-00798096.
XX
XX 01-MAR-2001; 2001US-00798096.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Ward DT, Watt AT;
XX
XX WPI; 2002-535979/57.
XX
XX Antisense compounds targeted to nucleic acids encoding RECQL2 associated
FT with Bloom's disorder, for modulating RECQL2 expression and treating
FT diseases e.g. tumors associated with expression of the RECQL2 in humans.
FT
XX Claim 3; Col 44; 86pp; English.
XX
XX The invention relates to antisense compounds targeted to nucleic acid
CC encoding RECQL2 (gene associated with Bloom's disorder) to inhibit the
CC expression of RECQL2. Antisense compounds of the invention are useful for
CC treating diseases associated with expression of RECQL2, in humans. They
CC are useful for diagnostics, therapeutics and as research reagent, e.g.
CC prophylactically to prevent or delay infection, inflammation or tumour
CC formation. They are also useful in antisense therapy. The present
CC sequence is an antisense oligonucleotide targeted to human RECQL2 DNA
XX
SQ Sequence 20 BP; 7 A; 7 C; 3 G; 3 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 498 CGAGGCATCTGGCTTCTGTT 517

DE Human RECQL2 antisense oligonucleotide, ISIS #137533.
XX Antisense; RECQL2; Bloom's disorder; prophylaxis; infection; tumour;
XX inflammation; therapy; human; phosphorothioate; ss.
XX Homo sapiens.
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT FT /*tag= a
FT FT /mod_base= OTHER
FT FT /note= "Phosphorothioate backbone"
FT modified_base 1..5
FT FT /*tag= b
FT FT /mod_base= OTHER
FT modified_base 3
FT FT /note= "2'-methoxyethyl nucleotides"
FT FT /*tag= d
FT FT /mod_base= m5c
FT FT 6
FT FT /*tag= e
FT FT /mod_base= m5c
FT modified_base 9..10
FT FT /*tag= f
FT FT /mod_base= m5c
FT modified_base 16..20
FT FT /*tag= c
FT FT /mod_base= OTHER
FT modified_base 16..17
FT FT /note= "2'-methoxyethyl nucleotides"
FT FT /*tag= g
FT FT /mod_base= m5c
FT modified_base 19
FT FT /*tag= h
FT FT /mod_base= m5c
XX
XX US6399378-B1.
XX
XX 04-JUN-2002.
XX
XX 01-MAR-2001; 2001US-00798096.
XX
XX 01-MAR-2001; 2001US-00798096.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Ward DT, Watt AT;
XX
XX WPI; 2002-535979/57.
XX
XX Antisense compounds targeted to nucleic acids encoding RECQL2 associated
FT with Bloom's disorder, for modulating RECQL2 expression and treating
FT diseases e.g. tumors associated with expression of the RECQL2 in humans.
FT
XX Claim 3; Col 44; 86pp; English.
XX
XX The invention relates to antisense compounds targeted to nucleic acid
CC encoding RECQL2 (gene associated with Bloom's disorder) to inhibit the
CC expression of RECQL2. Antisense compounds of the invention are useful for
CC treating diseases associated with expression of RECQL2, in humans. They
CC are useful for diagnostics, therapeutics and as research reagent, e.g.
CC prophylactically to prevent or delay infection, inflammation or tumour
CC formation. They are also useful in antisense therapy. The present
CC sequence is an antisense oligonucleotide targeted to human RECQL2 DNA
XX
SQ Sequence 20 BP; 7 A; 7 C; 3 G; 3 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 498 CGAGGCATCTGGCTTCTGTT 517

Db 20 CGAGGATTATGGCTGCTGTT 1
RESULT 1270
ABT07515/c
ID ABT07515 standard; DNA; 20 BP.
XX
AC ABT07515;
XX
XX 14-NOV-2002 (first entry)
XX
DE Rat protein phosphatase 2 oligo inhibitor SEQ ID No 129.
XX
XX Cytostatic; antidiabetic; antisense therapy; aberrant insulin regulation;
KW protein phosphatase 2 catalytic beta subunit; antisense compound; cancer;
KW hyperproliferative disorder; diabetes; inflammation; tumour; rat; ds.
XX
OS Rattus norvegicus.
XX
XX WO200264737-A2.
XX
XX 22-AUG-2002.
XX
XX 31-JAN-2002; 2002WO-US002805.
XX
XX 09-FEB-2001; 2001US-00780045.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Monia BP, Wyatt JR;
XX
XX WPI; 2002-657588/70.
XX
XX New antisense oligonucleotides targeted to nucleic acid encoding Protein
PT Phosphatase 2 catalytic subunit beta, useful for treating diseases
PT related to Protein Phosphatase 2 catalytic subunit beta expression, such
PT as cancer.
XX
XX Claim 3; Page 98; 137pp; English.
XX
XX The invention relates to a novel compound 8-50 nucleotides in length
CC targeted to a nucleic acid molecule encoding a protein phosphatase 2
CC catalytic beta subunit, where the compound specifically hybridises with
CC and inhibits the expression of protein phosphatase 2 catalytic beta
CC subunits, or specifically hybridises with at least an 8-nucleotide
CC portion of an active site on a nucleic acid molecule encoding a protein
CC phosphatase 2 catalytic beta subunit. The antisense compounds are useful
CC for modulating the expression of protein phosphatase 2 catalytic beta
CC subunits and for treating diseases or conditions associated with
CC expression of protein phosphatase 2 catalytic beta subunits, e.g.
CC aberrant insulin regulation or diabetes or a hyperproliferative disorder,
CC particularly cancer. The antisense compounds are also useful for
CC diagnostics, therapeutics, prophylaxis, e.g. to prevent or delay
CC infection, inflammation or tumour formation, as research reagents and
CC kits, and in distinguishing between functions of various members of a
CC biological pathway. This polynucleotide sequence represents an
CC oligonucleotide inhibitor of rat protein phosphatase 2 catalytic beta
CC subunit mRNA levels of the invention. NOTE: This oligonucleotide contains
CC phosphorothioate residues and has 2'-MOE wings with a deoxy gap
XX
SQ Sequence 20 BP; 4 A; 5 C; 2 G; 9 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1128 GAATGAGTACTGTGAGAAGA 1147
Db 20 GTATGACTAAGTGAAGAAGA 1
RESULT 1271

KW hypercholesterolaemia; cardiovascular disorder; ss;
KW hyperproliferative disorder; hyperlipidemic disorder;
XX phosphorothioate backbone; 2'-O-methoxyethyl wing.
XX Homo sapiens.
XX WO200222635-A1.
XX 21-MAR-2002.
XX 10-SEP-2001; 2001WO-US028235.
XX 11-SEP-2000; 2000US-00659791.
XX (ISIS-) ISIS PHARM INC.
XX Monia BP, Freier SM;
XX WPI; 2002-404805/43.
XX Novel antisense compound targeted to nucleic acid molecule encoding clusterin, useful for treating animal having disease associated with clusterin such as hyperlipidemic disorder, cardiovascular disorder.
XX Claim 3; Page 83; 125pp; English.
XX The invention comprises antisense oligonucleotides that are capable of inhibiting expression of the human clusterin gene. The antisense oligonucleotides of the invention are useful for inhibiting the expression of clusterin in cells. The antisense oligonucleotides are also useful for treating an animal with a disease or condition associated with clusterin (e.g. hypercholesterolaemia; cardiovascular disorders; hyperproliferative disorders; and hyperlipidemic disorders). The present DNA sequence represents a clusterin antisense oligonucleotide of the invention. NOTE: The present DNA sequence has a phosphorothioate backbone and also contains 2'-O-methoxyethyl wings
XX Sequence 20 BP; 5 A; 4 C; 2 G; 9 T; 0 U; 0 Other;
XX Query Match 0.7%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. NO. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 2027 AGTTTCCTTTTGAGATACT 2046
DB 1 AATTTCTTATTGACGTACT 20
RESULT 1273
ABV73654/C
ID ABV73654 standard; DNA; 20 BP.
XX AC ABV73654;
XX 06-JAN-2003 (first entry)
XX Human bcl-x exon 1/exon 2 antisense oligonucleotide #SEQ ID 46.
XX Antisense therapy; antisense oligonucleotide; apoptosis; mitosis;
XX differentiation; stress; hormone; cytokine; signalling molecule;
XX mRNA modulation; mRNA cleavage; therapeutic; human; bcl-x; ss.
XX Homo sapiens.
XX Key Location/Qualifiers
XX modified_base 1..20
XX /tag= a
XX /mod_base= OTHER
XX /note= "nucleotides 1-5 and 16-20 are 2'-methoxyethoxy
XX (2'MOE); optionally 1-20 are all 2'MOE; all 2'MOE
XX cytosines are 5-methyl-cytosines; all linkages are
XX phosphorothioate"
XX

ABL40915/C
ID ABL40915 standard; DNA; 20 BP.
XX AC ABL40915;
XX 03-JUL-2002 (first entry)
XX VHL (von Hippel-Lindau) mRNA inhibiting antisense oligo 2.
XX VHL; von Hippel-Lindau; cancer; transplantation; central nervous system;
KW nerve disease; nontropic; neuroprotective; antiparkinsonian; cytostatic;
KW cell therapy; antisense; ss.
XX Synthetic.
XX WO200226977-A1.
XX 04-APR-2002.
XX 27-SEP-2000; 2000WO-JP006668.
XX 27-SEP-2000; 2000WO-JP006668.
XX (FRET-) FRETEK CO LTD.
XX (KANN/) KANNO H.
XX Kanno H;
XX WPI; 2002-340015/37.
XX Host cell constructed by transferring von Hippel-Lindau gene into cancer cell or embryonic stem cell for in vitro proliferation before transplantation into e.g. central nervous system, useful for treating Parkinson's disease.
XX Disclosure; Page 11; 26pp; Japanese.
XX The invention provides a host cell constructed by transferring von Hippel-Lindau (VHL) gene into a cancer cell, or an embryonic stem cell, and expressing in it. Methods are also provided for obtaining nerve cells for derivation into nerves by transferring VHL gene into a cancer or an embryonic stem cell; and for inhibiting differentiation from nerve stem cells to nerve cells by suppressing expression of VHL gene by introducing antisense RNA or antisense DNA into a cancer cell or an embryonic stem cell. The host cells are for transplantation into central nervous system or peripheral nerve, which are useful in treating intractable nerve diseases due to function injury like Parkinson's disease, amyotrophic sclerosis, Huntington's chorea, Alzheimer's disease, brain infarction, spinal cord injury, cerebral contusion and malignant tumour. Sequences ABL40914-915 represent antisense oligos inhibiting the VHL mRNA
XX Sequence 20 BP; 5 A; 4 C; 9 G; 2 T; 0 U; 0 Other;
XX Query Match 0.7%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. NO. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1702 GCCACCCATTCTCCCGTTC 1721
DB 20 GCCACCCGAGTCTGCCCTTTC 1
RESULT 1272
ABN99674
ID ABN99674 standard; DNA; 20 BP.
XX AC ABN99674;
XX 16-AUG-2002 (first entry)
XX Human clusterin inhibiting antisense oligonucleotide 8.
XX Human; antisense inhibition; antisense oligonucleotide; clusterin;
XX

KW hyperproliferative disorder; breast cancer; prostate cancer;
 KW liver cancer; infection; inflammation; tumour formation; cytostatic;
 KW anti-diabetic; anti-inflammatory; antimicrobial; phosphorothioate;
 KW antisense therapy; ss.
 OS Homo sapiens.
 XX WO200262951-A2.
 PN 15-AUG-2002.
 XX 01-FEB-2002; 2002WO-US002772.
 XX 08-FEB-2001; 2001US-00780173.
 XX (ISIS-) ISIS PHARM INC.
 XX McKay R, Freier SM, Wyatt JR;
 PI WPI; 2002-627539/67.
 XX
 DR New antisense oligonucleotides targeted to nucleic acid encoding casein
 PT kinase 2-alpha prime, useful for diagnosing and/or treating a disease or
 PT condition associated with expression of casein kinase 2-alpha prime.
 XX
 PS Claim 3; Page 96; 129pp; English.
 XX
 CC The present invention relates to antisense oligonucleotides and methods
 CC for modulating the expression of human or mouse casein kinase 2-alpha
 CC prime. The antisense oligonucleotides are useful for inhibiting the
 CC expression of casein kinase 2-alpha prime, and for treating diseases or
 CC conditions associated with aberrant expression of casein kinase 2-alpha
 CC prime. Such diseases include diabetes mellitus, and hyperproliferative
 CC disorders (particularly cancers e.g. breast cancer, prostate cancer, or
 CC liver cancer). The antisense compounds are also useful for diagnostics,
 CC therapeutics, prophylaxis, e.g. to prevent or delay infection,
 CC inflammation or tumour formation, as research reagents and kits, and in
 CC distinguishing between functions of various members of a biological
 CC pathway. AB567840-AB567917 represent human or mouse casein kinase 2-alpha
 CC prime antisense oligonucleotides which comprise a phosphorothioate
 CC backbone
 XX
 SQ Sequence 20 BP; 3 A; 6 C; 11 G; 0 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1336 GAGGAGGAGGAGGGGGCCG 1355
 Db ||||| ||||| ||||| ||||| |||||
 1 GAGGAGGAGGAGGGGGCCG 20
 RESULT 1276
 ABA89830/c
 ID ABA89830 standard; DNA; 20 BP.
 XX
 AC ABA89830;
 XX
 XX 11-FEB-2002 (first entry)
 DT
 DE Human Syne-2 exon-intron boundary 5' splice donor #1.
 XX
 KW Human; oestrogen receptor alpha; ESR-alpha; ER; chromosome 6; Syne-2;
 KW synaptic nuclei expressed gene 2; haplotype; cytostatic; osteopathic;
 KW cardiant; vasotropic; gene therapy; vaccine; cancer; osteoporosis;
 KW cardiovascular disease; oestrogen receptor; ds.
 XX
 OS Homo sapiens.
 XX
 XX WO200162969-A2.
 PN 30-AUG-2001.
 PD

XX 20-FEB-2001; 2001WO-US005358.
 PF
 XX 22-FEB-2000; 2000US-0183756P.
 PR
 XX 20-OCT-2000; 2000US-00692414.
 PR
 XX 24-JAN-2001; 2001US-00768184.
 XX
 XX (PEKE) PE CORP NY.
 XX
 XX Kalush F, Cassel MJ, Hwang SS, Winn-Deen ES;
 PI WPI; 2002-041152/05.
 XX
 XX Novel variant of estrogen receptor alpha polypeptide useful for
 PT determining the biological activity of a protein for high throughput
 PT screening and for raising antibodies that elicit an immune response in
 PT host.
 XX
 XX Example; Page 57; 333pp; English.
 PS
 XX The present invention describes an isolated peptide (I) consisting of an
 CC amino acid sequence selected from: (a) the amino acid sequence of a
 CC variant of the oestrogen receptor alpha (ESR-alpha) protein in AAG68251;
 CC or (b) a fragment comprising at least 10 contiguous amino acids of the
 CC protein in AAG68251. (I) has cytostatic, osteopathic, cardiant and
 CC vasotropic activities, and can be used in gene therapy and vaccine
 CC production. (I) is useful for identifying an agent that binds to (I), by
 CC contacting (I) with an agent and assaying the contacted mixture to
 CC determine whether a complex is formed with the agent bound to the
 CC peptide. A polynucleotide (II), encoding (I), is useful in the
 CC development of diagnostics and therapies for diseases and disorders
 CC mediated/modulated by an oestrogen receptor (ER). (II) is also useful in
 CC gene therapy for treating cancer, osteoporosis and cardiovascular
 CC diseases. The human ESR-alpha gene is located on chromosome 6. ABA89779
 CC to ABA89828 represent oligonucleotides covering human ER exon-intron
 CC boundaries, and ABA89829 to ABA89868 represent oligonucleotides covering
 CC human synaptic nuclei expressed gene 2 exon-intron boundaries, which are
 CC used in an example from the present invention
 XX
 SQ Sequence 20 BP; 6 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1741 GGTGCCAGGTCGTGGTGAAA 1760
 Db ||||| ||||| ||||| ||||| |||||
 20 GGTGCCAGGTCATTGAAA 1
 RESULT 1277
 ABA89734
 ID ABA89734 standard; DNA; 20 BP.
 XX
 AC ABA89734;
 XX
 XX 29-JUL-2002 (first entry)
 DT
 XX
 DE Human Fas target oligonucleotide #49.
 XX
 KW Human; immunosuppressive; antiinflammatory; hepatotropic; cytostatic;
 KW vasotropic; hepatitis; cancer; allograft rejection; ds; Fas.
 XX
 OS Homo sapiens.
 XX
 XX US2002004490-A1.
 PN 10-JAN-2002.
 XX
 PD 09-MAR-2001; 2001US-00802669.
 XX
 PF 12-APR-1999; 99US-00290640.
 XX
 PR 18-SEP-2000; 2000US-00665615.
 PR

XX (DEAN/) DEAN N M.
 PA (MARC/) MARCUSSEON E G.
 PA (WYAT/) WYATT J.
 PA (ZHAN/) ZHANG H.
 XX
 PI Dean NM, Marcussone EG, Wyatt J, Zhang H;
 XX WPI; 2002-204886/26.
 XX
 PT Novel antisense compound targeted to nucleic acid encoding Fas, Fas
 PT ligand or Fas associated protein-1 is useful for inhibiting expression of
 PT Fas, Fas ligand, or Fas-1 in cells or tissues, and for treating
 PT hepatitis.
 XX
 PS Claim 3; Page 24; 84pp; English.
 XX
 CC This invention relates to an antisense compound encoding Fas, Fas ligand,
 CC or Fas associated protein-1 (Fap-1). The inhibition of Fas mediated
 CC signalling is thought to be immunosuppressive, antiinflammatory,
 CC hepatotropic, cytostatic and vasotropic. Antisense oligonucleotides were
 CC designed to target human Fas. Oligonucleotides were synthesised as
 CC chimeric oligonucleotides and are useful for treating an animal having an
 CC autoimmune or inflammatory disease e.g., hepatitis, cancer, a condition
 CC associated with apoptosis, allograft rejection, or ischemia reperfusion
 CC injury. Optionally, the above mentioned conditions are prevented by
 CC contacting the allograft with the antisense oligonucleotide. The
 CC oligonucleotides are used in diagnostics, therapeutics, prophylaxis and
 CC as research reagents and in kits. The oligonucleotides are also useful
 CC for research purposes. The present nucleotide sequence is related to
 CC human Fas
 XX
 SQ Sequence 20 BP; 7 A; 2 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1828 AGGTGCGCCCTTNTTGAACATT 1847
 Db 1 ATGGGACATTATTGAACATT 20

RESULT 1278
 ABL90867
 ID ABL90867 standard; DNA; 20 BP.
 XX
 AC ABL90867;
 XX
 DT 27-MAY-2002 (first entry)
 XX
 DE Human protein kinase C-alpha antisense oligonucleotide 14.
 XX
 KW Human; PKC antisense oligonucleotide; protein kinase C; PKC; PKC-alpha;
 KW PKC-beta type I; PKC-beta type II; PKC-gamma; PKC-delta; PKC-epsilon;
 KW PKC-zeta; PKC-eta; PKC expression modulation; ss;
 KW hyperproliferative condition; tumour; glioblastoma; bladder cancer;
 KW breast cancer; colon cancer; lung cancer; inflammatory condition;
 KW psoriasis; phosphorothioate backbone.
 XX
 OS Homo sapiens.
 XX
 PN US6339066-B1.
 XX
 XX US6339066-B1.
 XX
 PD 15-JAN-2002.
 XX
 PF 31-MAR-1997; 97US-00829637.
 XX
 XX 11-JAN-1990; 90US-00463358.
 PR 13-AUG-1990; 90US-00566977.
 PR 11-JAN-1991; 91WO-US000243.
 PR 15-OCT-1991; 91US-00777760.
 PR 16-OCT-1991; 91US-00777707.

PR 16-MAR-1992; 92US-00852852.
 PR 05-MAY-1993; 93US-00058023.
 PR 09-JUL-1993; 93US-00089996.
 PR 29-AUG-1994; 94US-00297703.
 PR 07-JUN-1995; 95US-00481066.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 XX Bennett CF, Dean NM, Cook PD, Hoke G;
 PI WPI; 2002-215022/27.
 XX
 DR New antisense oligonucleotide having nucleoside units which specifically
 XX binds mRNA encoding human protein kinase C isoform, useful for treating
 PT hyperproliferative and inflammatory diseases e.g. psoriasis, tumor and
 PT cancer.
 PT
 XX
 PS Example 1; Col 29-30; 77pp; English.
 XX
 CC The invention comprises antisense oligonucleotides designed to bind mRNA
 CC encoding a human protein kinase C (PKC) isoform (i.e. PKC-alpha, PKC-beta
 CC type I, PKC-beta type II, PKC-gamma, PKC-delta, PKC-epsilon, PKC-zeta,
 CC and PKC-eta). The antisense oligonucleotides of the invention are useful
 CC for modulating the expression of the PKC isoforms. The antisense
 CC oligonucleotides are useful for treating hyperproliferative conditions
 CC (e.g. tumour, glioblastoma, bladder cancer, breast cancer, colon cancer
 CC and lung cancer), and inflammatory conditions (e.g. psoriasis). The
 CC antisense oligonucleotides of the invention are also useful for detection
 CC and diagnosis of PKC expression. The present sequence represents a human
 CC PKC antisense oligonucleotide of the invention. NOTE: The present
 CC sequence contains a phosphorothioate backbone
 XX
 SQ Sequence 20 BP; 9 A; 4 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1409 AAGAGAAAGACCCGAGGAG 1428
 Db 1 AAGAGAGAGACCCGAGGAG 20

RESULT 1279
 ABL40233/C
 ID ABL40233 standard; DNA; 20 BP.
 XX
 AC ABL40233;
 XX
 DT 23-MAY-2002 (first entry)
 XX
 DE Rice PHGPx 5' RACE PCR primer.
 XX
 KW Rice; phospholipid hydroperoxide glutathione peroxidase; PHGPx;
 KW glutathione phosphatide hydroperoxidase; senility; transgenic plant;
 KW plant; enzyme; PCR primer; ss.
 XX
 OS Oryza sativa.
 OS Synthetic.
 XX
 PN CN1324817-A.
 XX
 PD 05-DEC-2001.
 XX
 PF 19-MAY-2000; 2000CN-00109313.
 XX
 PR 19-MAY-2000; 2000CN-00109313.
 XX
 XX (UYQI) UNIV QINGHUA.
 PA
 XX Liu J, Li W, Zhao N;
 PI WPI; 2002-217502/28.
 XX

```
XX Rice glutathione phospholipid hydrogen peroxidase gene, protein and their
PT application.
XX
XX Example 2; Page 9 (Disclosure); 24pp; Chinese.
XX
CC The present invention describes rice phospholipid hydroperoxide
CC glutathione peroxidase (PHGPx), also called glutathione phosphatide
CC hydroperoxidase). The invention also provides a recombinant expression
CC vector containing the PHGPx gene, and a host cell containing the
CC expression vector. The rice PHGPx gene can be used for protecting cell
CC membrane injury due to phosphatide hydroperoxidation. It can also be used
CC for making transgenic plants delaying senility, specially making
CC transgenic rice capable of delaying senility and raising photosynthetic
CC efficiency. The present sequence represents a 5' RACE PCR primer for rice
CC PHGPx, which is used an example from the present invention
XX
XX Sequence 20 BP; 4 A; 1 C; 8 G; 7 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
Qy 211 AAAATGGAATCTATCGCCC 230
Db 20 AAAATCGAATCCCTCTCCC 1
RESULT 1280
AAD39522/C
ID AAD39522 standard; DNA; 20 BP.
XX
XX AAD39522;
XX
XX 04-OCT-2002 (first entry)
XX
XX Human calreticulin antisense oligonucleotide, ISIS 109315.
XX
XX Human; calreticulin; antisense compound; hyperproliferative disorder;
KW cancer; autoimmune disease; viral infection; cardiovascular disease;
KW antisense therapy; cytostatic; immunosuppressive; virucide; antisense;
KW phosphorothioate backbone; ss.
XX
XX Homo sapiens.
OS Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone"
FT modified_base 1..5
FT /tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 1
FT /tag= d
FT /mod_base= m5c
FT modified_base 3
FT /tag= e
FT /mod_base= m5c
FT modified_base 6..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 8
FT /tag= f
FT /mod_base= m5c
FT modified_base 9
FT /tag= g
FT /mod_base= m5c
FT modified_base 13
FT /tag= h
```

```
FT /mod_base= m5c
FT modified_base 15
FT /tag= i
FT /mod_base= m5c
FT modified_base 16
FT /tag= j
FT /mod_base= m5c
FT modified_base 18
FT /tag= k
FT /mod_base= m5c
XX WO200236743-A2.
XX
XX 10-MAY-2002.
XX
XX 30-OCT-2001; 2001WO-US049045.
XX
XX 30-OCT-2000; 2000US-00702327.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Bennett CF, Cowsert LM;
XX
XX WPI; 2002-479759/51.
XX
XX Novel antisense compound targeted to nucleic acid encoding calreticulin,
XX useful for treating a human having disease or condition associated with
XX calreticulin e.g. cancer, viral infection, autoimmune disease.
XX
XX Claim 3; Page 82; 109pp; English.
XX
XX The invention relates to antisense compounds, compositions and methods
XX for modulating the expression of calreticulin. The compositions comprise
XX antisense compounds, particularly antisense oligonucleotides, targeted
XX to nucleic acids encoding calreticulin. The antisense compound is useful
XX for inhibiting the expression of calreticulin in human cells or tissues.
XX It is also useful for treating a human having a disease or condition
XX associated with calreticulin, e.g., hyperproliferative disorder e.g.
XX cancer, autoimmune disease, viral infection or cardiovascular disease, by
XX inhibiting expression of calreticulin. It is useful for diagnostics,
XX therapeutics, prophylaxis and as research reagents and kits. It is also
XX used in antisense therapy. The present sequence is an antisense compound
XX targeted to human calreticulin. This sequence is used to study the
XX antisense inhibition of calreticulin expression-phosphorothioate 2'-MOE
XX gapmer oligonucleotides
XX
XX Sequence 20 BP; 4 A; 8 C; 3 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
Qy 1232 CTGAGGAGAGTGGCGATGAG 1251
Db 20 CTGAGGAGTTTGGCAACGAG 1
RESULT 1281
ABA02240/C
ID ABA02240 standard; DNA; 20 BP.
XX
XX ABA02240;
XX
XX 12-FEB-2002 (first entry)
XX
XX Human/mouse C/EBP phosphorothioate antisense oligonucleotide, SEQ ID:52.
XX
XX Human; C/EBP alpha; CCAAT/enhancer-binding protein alpha; CEBPA;
KW transcription factor; tissue development; cellular function;
KW proliferation; differentiation; adipocyte; energy metabolism;
KW chondrogenic; ovulation; follicular development;
KW hepatic steroid-induced cell cycle arrest; GLUT2 promoter regulation;
KW hormonal metabolic regulation; granulocyte development; cancer;
XX
```

tumour formation; infection; inflammation; expression inhibition;
antisense therapy; quantitative real-time PCR primer; ss.

Homo sapiens.
Mus musculus.

Key Location/Qualifiers
modified_base 1..20
/tag= a
/mod_base= OTHER
/note= "Phosphorothioate linkages"
modified_base 1..15
/tag= b
/mod_base= OTHER
/note= "2'-methoxyethyl (2'-MOE) nucleotides. All 2' MOE
cytosines are 5-methylcytosine"
modified_base 16..20
/tag= c
/mod_base= OTHER
/note= "2'-methoxyethyl (2'-MOE) nucleotides. All 2' MOE
cytosines are 5-methylcytosine"
US6306655-B1.
23-OCT-2001.
13-JUN-2000; 2000US-00593589.
13-JUN-2000; 2000US-00593589.
(ISIS-) ISIS PHARM INC.
Monia BP, Butler MM, Wyatt J;
WPI; 2002-040202/05.

New antisense oligonucleotides for modulating the expression of
CCAAT/Enhancer-binding proteins alpha, particularly useful for
preventing, delaying or treating infection, inflammation or tumor
formation.

Claim 1; Col 42; 44pp; English.

Sequences ABA02205-ABA02282 represent antisense oligonucleotides targeted
to the human CCAAT/enhancer-binding protein alpha (C/EBP alpha) gene,
which inhibit its expression. The antisense oligonucleotides were
designed to target different regions of the human C/EBP alpha RNA, and
were analysed for their effect on C/EBP alpha mRNA levels by quantitative
real-time PCR. A similar investigation on mouse C/EBP alpha expression
was performed using a subset of the antisense oligonucleotides that were
capable of hybridising to mouse C/EBP alpha mRNA. The C/EBP family of
proteins are a family of transcription factors which regulate the
expression of wide range of genes that control normal tissue development,
cellular function, cellular proliferation and functional differentiation.
C/EBP alpha (also known as CEBPA) is primarily found in tissues involved
in energy metabolism which have a capacity to metabolise lipids,
cholesterol and other sterols. It is thought to be involved in the
regulation of adipocyte and chondrogenic differentiation, and is also
involved in follicular development and ovulation, steroid-induced cell
cycle arrest in the liver, in controlling glucose transporter GLUT2
promoter activity, in the hormonal regulation of metabolism, and in
granulocyte development. The oligonucleotides of the invention are useful
for diagnosis, prevention and treatment of conditions associated with
C/EBP expression, such as cancer, tumour formation, infection, or
inflammation

Sequence 20 BP; 1 A; 4 C; 6 G; 9 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1119 CCAGAACACGATGAGTACC 1138

Db 20 CAAGAACACGATGAGTACC 1

RESULT 1282

AAS97061
ID AAS97061 standard; DNA; 20 BP.

XX AAS97061;

XX 26-FEB-2002 (first entry)

XX TRA-8 heavy and light chain RT-PCR primer LCSR.

XX Tumour necrosis factor-related apoptosis-inducing ligand receptor; TRAIL;
KW TRAIL receptor DR5; cytostatic; apoptosis; cell proliferation;
KW autoimmune disease; systemic lupus erythematosus; Hashimoto's disease;
KW rheumatoid arthritis; Sjogren's syndrome; Crohn's disease; anaemia;
KW Addison disease; scleroderma; Goodpasture's syndrome; sterility;
KW myasthenia gravis; multiple sclerosis; Basedow's disease; diabetes;
KW allergy; arteriosclerosis; myocarditis; cardiomyopathy;
KW glomerular nephritis; cancer; antibody; PCR primer; chromosome 8p21-22;
KW TRA-8; ss.

XX Synthetic.

XX WO200183560-A1.

XX 08-NOV-2001.

XX 02-MAY-2001; 2001WO-US014151.

XX 02-MAY-2000; 2000US-0201344P.

XX (UABR-) UAB RES FOUND.

XX Zhou T, Ichikawa K, Kimberly RP, Koopman WJ;

XX WPI; 2002-049338/06.

XX Novel antibody specific for tumor necrosis factor-related apoptosis-
inducing ligand, useful for inhibiting cell proliferation in cancer.

XX Example 16; Page 73; 229pp; English.

XX The invention describes a novel antibody which recognizes a tumour
necrosis factor (TNF)-related apoptosis-inducing ligand (TRAIL) receptor
DR5 (located on chromosome 8p21-22). The antibody has apoptosis-inducing
activity to a cell expressing DR5 in vivo. It is also useful for
preparing a therapeutic for selective apoptosis of abnormal or
dysregulated cells, and for inhibiting cell proliferation in a cell,
preferably a human breast, ovary, colon, haematopoietic, prostate,
lymphatic, lung, glioma or liver cancer cell. A therapeutic agent may
also be administered e.g. paclitaxel, taxol or cycloheximide. The
antibody is used to treat an autoimmune disease, systemic lupus
erythematosus, Hashimoto's disease, rheumatoid arthritis, graft-versus-
host disease, Sjogren's syndrome, Crohn's disease, pernicious anaemia,
Addison disease, scleroderma, Goodpasture's syndrome, autoimmune
haemolytic anaemia, sterility, myasthenia gravis, multiple sclerosis,
Basedow's disease, insulin-dependent diabetes mellitus, allergy, atopic
disease, arteriosclerosis, myocarditis, cardiomyopathy, glomerular
nephritis, hypoplastic anaemia, rejection after organ transplantation,
and numerous malignancies of lung, prostate, liver, ovary, lymphatic or
breast tissue. This primer was used to isolate the mouse TRAIL TRA-8, a
ligand of the DR5 receptor and the TRAIL on which the humanised
antibodies of the invention are based

XX Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 634 GACCGGTCATGACTGTGTC 653
 ||| ||||| ||| |||
 Db 1 GACTGGGTCATCAATGTC 20

RESULT 1283
 AAS97059/c
 ID AAS97059 standard; DNA; 20 BP.

AC AAS97059;
 XX
 XX 26-FEB-2002 (first entry)
 XX
 XX TRA-8 heavy and light chain RT-PCR primer L5CS.

XX Tumour necrosis factor-related apoptosis-inducing ligand receptor; TRAIL;
 KW TRAIL receptor DR5; cytostatic; apoptosis; cell proliferation;
 KW autoimmune disease; systemic lupus erythematosus; Hashimoto's disease;
 KW rheumatoid arthritis; Sjogren's syndrome; Crohn's disease; anaemia;
 KW Addison disease; scleroderma; Goodpasture's syndrome; sterility;
 KW myasthenia gravis; multiple sclerosis; Basedow's disease; diabetes;
 KW allergy; arteriosclerosis; myocarditis; cardiomyopathy;
 KW glomerular nephritis; cancer; antibody; PCR primer; chromosome 8p21-22;
 KW TRA-8; SS.

XX Synthetic.
 XX WO200183560-A1.
 PN
 XX 08-NOV-2001.
 PD
 XX 02-MAY-2001; 2001WO-US014151.
 PF
 XX 02-MAY-2000; 2000US-0201344P.
 PR
 XX (UABR-) UAB RES FOUND.
 PA

XX Zhou T, Ichikawa K, Kimberly RP, Koopman WJ;
 XX WPI; 2002-049338/06.
 XX Novel antibody specific for tumor necrosis factor-related apoptosis-
 PT inducing ligand, useful for inhibiting cell proliferation in cancer.
 PT
 XX Example 16; Page 73; 229pp; English.

XX The invention describes a novel antibody which recognizes a tumour
 CC necrosis factor (TNF)-related apoptosis-inducing ligand (TRAIL) receptor
 CC DR5 (located on chromosome 8p21-22). The antibody has apoptosis-inducing
 CC activity to a cell expressing DR5 in vivo. It is also useful for
 CC preparing a therapeutic for selective apoptosis of abnormal or
 CC dysregulated cells, and for inhibiting cell proliferation in a cell,
 CC preferably a human breast, ovary, colon, haematopoietic, prostate,
 CC lymphatic, lung, glioma or liver cancer cell. A therapeutic agent may
 CC also be administered e.g. paclitaxel, taxol or cycloheximide. The
 CC antibody is used to treat an autoimmune disease, systemic lupus
 CC erythematosus, Hashimoto's disease, rheumatoid arthritis, graft-versus-
 CC host disease, Sjogren's syndrome, Crohn's disease, pernicious anaemia,
 CC Addison disease, scleroderma, Goodpasture's syndrome, autoimmune
 CC haemolytic anaemia, sterility, myasthenia gravis, multiple sclerosis,
 CC Basedow's disease, insulin-dependent diabetes mellitus, allergy, atopic
 CC disease, arteriosclerosis, myocarditis, cardiomyopathy, glomerular
 CC nephritis, hypoplastic anaemia, rejection after organ transplantation,
 CC and numerous malignancies of lung, prostate, liver, ovary, lymphatic or
 CC breast tissue. This primer was used to isolate the mouse TRAIL TRA-8, a
 CC ligand of the DR5 receptor and the TRAIL on which the humanised
 CC antibodies of the invention are based

XX Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 634 GACCGGTCATGACTGTGTC 653
 ||| ||||| ||| |||
 Db 20 GACTGGGTCATCAATGTC 1

RESULT 1284
 ABL43513
 ID ABL43513 standard; DNA; 20 BP.

AC ABL43513;
 XX
 XX 11-APR-2002 (first entry)
 XX
 XX Human chromosome 1p36-35 PCR primer SEQ ID NO:557.

XX Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
 KW PCR primer; SS.
 XX Homo sapiens.
 XX JP2001321190-A.
 PN
 XX 20-NOV-2001.
 PD

XX 12-MAR-2001; 2001JP-00068285.
 PF
 XX 10-MAR-2000; 2000JP-00066716.
 PR
 XX (RIKA) RIKAGAKU KENKYUSHO.
 PA (GENO-) GENOTEX YG.
 PA
 XX WPI; 2002-144136/19.
 DR
 XX Arraying genome clones.
 PT
 XX Claim 4; Page 15; 528pp; Japanese.

XX The present invention describes a method of arraying genome clones. The
 CC method comprises: (a) clones of the genomic libraries contained in
 CC multiwell plates numbered for discrimination are mixed in each of the
 CC multiwell plates; (b) a primer designed based on the chromosome marker
 CC sequence is added to the mixture to carry out an amplification reaction;
 CC (c) a signal corresponding to the marker is detected from the resultant
 CC amplified product to specify the discrimination Nos. of the multiwell
 CC plates containing the clones having said marker sequence; (d) the order
 CC of the markers is changed so that the same discrimination Nos. succeed to
 CC the maximum in the specified discrimination Nos. to array the multiwell
 CC plates; (e) the clones in the multiwell plates of the specified
 CC discrimination Nos. are mixed respectively in each wells of longitudinal
 CC and lateral directions; (f) the mixed clones are cultured and the
 CC resultant cultures are amplified by using the above primer; (g) signals
 CC are detected from the amplified products; (h) the clones in the multiwell
 CC plates are specified from the detected result; and (i) the clones are
 CC reconstituted as the positions on the chromosome and arrayed. The
 CC microarray is useful for gene analysis. ABL42957 to ABL45322 represent
 CC PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634
 CC represent PCR primers for human chromosome 21q22.1, which are
 CC specifically claimed for use in the present invention

XX Sequence 20 BP; 5 A; 7 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 735 TAACCTACCCGCTCCGAGACG 754
 ||| ||||| ||| |||
 Db 1 TCACCTACAGCTCCGTCACG 20

RESULT 1285
 ABL43625/c

ID ABL43625 standard; DNA; 20 BP.
 AC ABL43625;
 XX
 DT 11-APR-2002 (first entry)
 XX
 DE Human chromosome 1p36-35 PCR primer SEQ ID NO:669.
 XX
 KW Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
 XX PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 PN JP2001321190-A.
 XX
 PD 20-NOV-2001.
 XX
 PF 12-MAR-2001; 2001JP-00068285.
 XX
 XX 10-MAR-2000; 2000JP-00066716.
 XX
 PA (RIKA) RIKAGAKU KENKYUSHO.
 PA (GENO-) GENOTEX YG.
 XX
 DR WPI; 2002-144136/19.
 XX
 PT Arraying genome clones.
 PT
 PS Claim 4; Page 18; 528pp; Japanese.
 XX
 CC The present invention describes a method of arraying genome clones. The
 CC method comprises: (a) clones of the genomic libraries contained in
 CC multiwell plates numbered for discrimination are mixed in each of the
 CC multiwell plates; (b) a primer designed based on the chromosome marker
 CC sequence is added to the mixture to carry out an amplification reaction;
 CC (c) a signal corresponding to the marker is detected from the resultant
 CC amplified product to specify the discrimination Nos. of the multiwell
 CC plates containing the clones having said marker sequence; (d) the order
 CC of the markers is changed so that the same discrimination Nos. succeed to
 CC the maximum in the specified discrimination Nos. to array the multiwell
 CC plates; (e) the clones in the multiwell plates of the specified
 CC discrimination Nos. are mixed respectively in each wells of longitudinal
 CC and lateral directions; (f) the mixed clones are cultured and the
 CC resultant cultures are amplified by using the above primer; (g) signals
 CC are detected from the amplified products; (h) the clones in the multiwell
 CC plates are specified from the detected result; and (i) the clones are
 CC reconstituted as the positions on the chromosome and arrayed. The
 CC microarray is useful for gene analysis. ABL42957 to ABL45322 represent
 CC PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634
 CC represent PCR primers for human chromosome 21q22.1, which are
 CC specifically claimed for use in the present invention
 XX
 SQ Sequence 20 BP; 4 A; 4 C; 7 G; 5 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 610 GTGGAAGAGCGCTTCTACAC 629
 DB 20 GTGGAAGAGCGCTTCTCCCC 1
 RESULT 1286
 ABK95181
 ID ABK95181 standard; DNA; 20 BP.
 XX
 AC ABK95181;
 XX
 DT 24-SEP-2002 (first entry)
 XX
 XX Rat liver tissue high copy number gene, killer primer #27.
 DE
 XX

KW Normalised cDNA library; low copy gene library; killing reaction;
 KW gene therapy; killer primer; PCR; primer; ss.
 XX
 OS Synthetic.
 XX
 PN WO200245472-A2.
 XX
 PD 13-JUN-2002.
 XX
 XX 11-JUL-2001; 2001WO-IB001343.
 PF
 XX 12-JUL-2000; 2000US-00614614.
 PR
 PA (QBIQ-) QBI ENTERPRISES LTD.
 XX
 PI Mugasimangalam RC;
 XX
 DR WPI; 2002-508535/54.
 XX
 XX Constructing normalized cDNA library, by annealing complements of target
 PT mRNA poly-A region (non)target RNA, producing cDNA molecules, ligating
 PT cDNA into a vector after ligating adaptors for cloning non-target cDNA.
 XX
 PS Claim 11; Page 23; 44pp; English.
 XX
 CC The invention describes a method of constructing a normalised cDNA
 CC library, by annealing oligonucleotides complementary to 3' poly-A region
 CC of target mRNA to non-target or target RNA to produce heteroduplexes,
 CC cleaving the heteroduplexes with RNase H, adding oligo(dT) or oligo(dU)
 CC primers, synthesising double stranded (ds) cDNA molecules, ligating
 CC adaptors to both ends of the ds cDNA, removing ds cDNA fragments and
 CC ligating ds cDNA into a vector. The methods discussed are useful for
 CC constructing a normalised cDNA library, a low copy gene library and for
 CC preparing a probe from a biological sample which involves performing a
 CC killing reaction to eliminate high copy genes, performing a reverse
 CC transcription reaction to amplify the low copy genes, and isolating the
 CC cDNA for use as a probe. The methods are useful in the analysis and
 CC diagnosis of disease states, to study the cellular differentiation and in
 CC gene therapy. The methods allow preferential elimination of highly
 CC expressed genes through cycling of the killing reaction. Thus, the lower
 CC copy number of the mRNA, the more frequently it will be cloned allowing
 CC enrichment of differentially expressed genes. The methods efficiently
 CC reduce the redundancy of highly expressed genes, and increases the
 CC relative amount of transcripts of rarely expressed genes. This sequence
 CC represents a killer primer used to reduced the number of mRNA's from high
 CC copy number gene whilst creating a cDNA library using the method of the
 CC invention
 XX
 SQ Sequence 20 BP; 6 A; 5 C; 3 G; 6 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 270 CGATGACTACATTAAATTCCT 289
 DB 1 CGATGACCACATTCAGTTAT 20
 RESULT 1287
 ABK90408
 ID ABK90408 standard; DNA; 20 BP.
 XX
 AC ABK90408;
 XX
 DT 05-NOV-2002 (first entry)
 XX
 DE HCV protease NS2/3 (810-1206) PCR primer #1.
 XX
 XX HCV; ss; PCR; protease; NS2/3 (810-1206); hepatitis C virus infection;
 KW chronic liver disease; cirrhosis; end-stage liver disease; virucide;
 KW hepatotropic; antiinflammatory; lauryldiethylamine oxide; LDAO;
 KW chaotropic agent; primer.

XX Hepatitis C virus.
OS Synthetic.
XX WO200248375-A2.
XX 20-JUN-2002.
XX 13-DEC-2001; 2001WO-CA001796.
XX 15-DEC-2000; 2000US-0256031P.
XX (BOEH) BOEHRINGER INGELHEIM CANADA LTD.
XX Thibeault D, Lamarre D, Maurice R, Pilote L, Pause A;
XX WPI; 2002-599511/64.
XX Novel polypeptide for screening inhibitors of non-structural proteases
PT useful as therapeutic agents against hepatitis C virus, comprises full
PT length non-structural protease, or its truncation.
XX Example 1; Page 24; 67pp; English.
XX The invention relates to an isolated polypeptide consisting of a full-
CC length HCV (hepatitis C virus) non-structural (NS2/3) protease (referred
CC to also as NS2/3 (810-1206)), or its truncation, having as its N-terminal
CC residue amino acid 810 to 906, or having a minimal amino acid sequence
CC from residues 904 to 1206 of hepatitis C virus (HCV) 1b-40 full-length
CC NS2/3 protease. Also included are (1) a composition (C) comprising an
CC isolated HCV NS2/3 protease selected from full length NS2/3 protease, or
CC its truncation or a mutated sequence, where the protease is in a solution
CC comprising a sufficient concentration of lauryldiethylamine oxide (LDAO)
CC to prevent auto-cleavage of the protease; (2) a NS2/3 inhibitory peptide
CC appearing as ABG32198; (3) producing (M1) a refolded, inactive HCV NS2/3
CC protease, involving isolating the protease in the presence of a
CC chaotropic agent, refolding the isolated protease by contacting it with a
CC reducing agent, and LDAO in the presence of reduced concentration of the
CC chaotropic agent or a polar additive; (4) producing (M2) an active NS2/3
CC protease, involving diluting refolded inactive NS2/3 protease in a medium
CC containing an activation detergent to induce auto-cleavage of the NS2/3
CC protease; (5) measuring (M3) the auto-cleavage activity of NS2/3
CC protease, involving incubating the active NS2/3 protease produced by M2
CC for sufficient time to induce auto-cleavage of NS2/3 protease and produce
CC cleavage products or their fragments, and measuring the presence or
CC absence of uncleaved NS2/3 protease, cleavage products or their fragments
CC ; and (6) screening a potential inhibitor of auto-cleavage activity of an
CC active NS2/3 protease, involving carrying out M3 in the presence of, or
CC absence of the potential inhibitor, comparing the amount of uncleaved
CC NS2/3 protease, cleavage products or their fragments. The protease is
CC useful for detailed biochemical characterisation of the enzymes and in
CC the development of in vitro assays for screening novel inhibitors of
CC NS2/3 protease which are useful as therapeutic agents against HCV
CC infection (which causes chronic liver disease, cirrhosis and end-stage
CC liver disease. M1 is useful for high level production of protease. The
CC present is a PCR primer used to isolate the sequence encoding the NS2/3
CC (810-1206) protein with a streptavidin tag
XX
SQ Sequence 20 BP; 4 A; 5 C; 8 G; 3 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
Qy 629 CCACGGACCGGGTCATGACT 648
Db 1 CCATGGACCGGGAGATGCT 20
RESULT 1288
ABK37420/c
ID ABK37420 standard; DNA; 20 BP.
XX

AC ABK37420;
XX 08-MAY-2002 (first entry)
XX Rat PTP1B mRNA level inhibition antisense DNA #137.
XX Human; mouse; rat; protein tyrosine phosphatase 1B; PTP1B; ss; adipose;
KW liver; kidney; metabolic disease; type 2 diabetes; cancer;
KW hyperproliferative condition; blood serum; blood plasma; antidiabetic;
KW blood glucose level; cytostatic; anorectic; antisense gene therapy;
KW PTP1B mRNA level inhibition.
XX
OS Rattus norvegicus.
XX WO200210378-A2.
XX 07-FEB-2002.
XX 30-JUL-2001; 2001WO-US023874.
XX 31-JUL-2000; 2000US-00629644.
XX (ISIS-) ISIS PHARM INC.
XX Cowsett LM, Wyatt J, Freier SM, Monia BP, Butler MM, McKay R;
PI WPI; 2002-180079/23.
XX Novel antisense compound useful for treating type 2 diabetes, cancer and
PT obesity, is targeted to nucleic acid encoding human protein phosphatase
PT 1B, and hybridizes and inhibits PTP1B expression.
XX Claim 3; Page 73; 142pp; English.
XX The invention relates to a compound targeted to a nucleic acid molecule
CC encoding protein phosphatase 1B (PTP1B), which specifically hybridises
CC with and inhibits the expression of PTP1B. The compounds of the invention
CC are useful for inhibiting the expression of PTP1B in liver, kidney or
CC adipose cells or tissues and for treating an animal, preferably human,
CC having a disease or condition associated with PTP1B, including metabolic
CC diseases or conditions, e.g. type 2 diabetes and obesity, or
CC hyperproliferative conditions such as cancer. The sequences are also
CC useful for decreasing blood (serum or plasma) glucose levels in an animal
CC e.g. a diabetic human or rodent, for preventing or delaying the onset of
CC a disease or condition associated with PTP1B, and for preventing or
CC delaying the onset of an increase in blood glucose levels. This sequence
CC represents a PTP1B mRNA level inhibition antisense oligonucleotide of the
CC invention
XX
SQ Sequence 20 BP; 2 A; 9 C; 4 G; 5 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
Qy 238 GCCAATGCTGAGGAGATGAC 257
Db 20 GCACAGGCTGAGGAGATGCC 1
RESULT 1289
ABZ47983
ID ABZ47983 standard; DNA; 20 BP.
XX
AC ABZ47983;
XX 26-JUN-2003 (first entry)
XX Human ATP-binding cassette ABCG1 gene polymorphic site, #4767-1.
XX Human; drug metabolising enzyme; gene; drug metabolism; chromosome 21;
KW polymorphic site; drug evaluation; drug screening; genotyping;
KW genetic profiling; therapeutic customisation; adverse reaction;

KW Clinical trial; drug approval; ds.
XX Homo sapiens.
XX
XX Location/Qualifiers
FH replace(20, GCACGAGCAGCAGACTCTGATGAGGAGGGGAGGGGGCACCAGG
FT CAGCAGACTCTGA)
FT /*tag= a
FT
XX WO200252044-A2.
XX
XX
XX 04-JUL-2002.
XX
XX 27-DEC-2001; 2001WO-JP011592.
XX
XX 27-DEC-2000; 2000JP-00399443.
PR 02-MAY-2001; 2001JP-00132556.
PR 27-AUG-2001; 2001JP-00256862.
XX
XX (RIKE) RIKEN KK.
XX
XX Nakamura Y, Sekine A, Iida A, Saito S;
PI WPI; 2002-593571/62.
XX
XX Identifying individuals having a polymorphism, useful for determining the
PT effectiveness or side effect of a drug or treatment protocol, comprises
PT detecting at least one polymorphism in the drug metabolizing enzyme
PT nucleic acid.
XX
XX Claim 23; Page 154; 2785pp; English.
XX
XX Sequences ABZ43217-ABZ50887 represent polymorphic sites within genes
CC encoding enzymes associated with drug metabolism. The invention relates
CC to methods and compositions for identifying individuals who have at least
CC one polymorphism in such drug metabolizing enzyme-encoding genes. The
CC polymorphisms may be identified in a nucleic acid sample using probes or
CC primers specific for a sequence selected from ABZ43217-ABZ50887 using a
CC variety of detection assays, including hybridisation assays, nucleic acid
CC arrays and PCR-based methods. The invention also encompasses methods of
CC evaluating and screening drugs using genetic polymorphism data. Genetic
CC polymorphism data, particularly that relating to single nucleotide
CC polymorphisms (SNPs), may be used in studying the relationship between
CC DNA sequence variations and human diseases, conditions, and responses to
CC drugs. SNPs are also useful as polymorphism markers for discovering genes
CC that cause or exacerbate certain diseases. SNPs are particularly useful
CC in the above respects as they are stable in populations, occur
CC frequently, and have lower mutation rates than other genome variations
CC such as repeating sequences. The detection and analysis of polymorphisms
CC in genes encoding drug metabolizing enzymes allows the customisation of
CC drug therapies based upon the genetic profile of individual patients.
CC This would not only take the guesswork out of selecting the drug with the
CC greatest therapeutic effect for a particular patient, but would also
CC reduce the likelihood of adverse reactions, thereby increasing safety.
CC Methods of the invention are also useful in the drug discovery and
CC approval processes. For example, individuals could be selected for
CC clinical trials only if their genetic profiles indicate that they are
CC capable of responding to a particular drug or drug class, and previously
CC failed drug candidates could be revived if they were matched with more
CC appropriate patient populations. The methods, data and compositions of
CC the invention may therefore lead to an increase in the range of
CC possible drug targets and decreases in the number of adverse drug
CC reactions, failed drug trials, the time taken for a drug to be approved,
CC the length of time patients are on medication and the number of different
CC medications a patient needs to take before finding an effective therapy.
CC Note: This sequence is 20 nucleotides shorter than the sequence also
CC referred to as SEQ ID NO:4767 (ABZ47983) which is shown on page 1939 of
CC the specification
XX
XX Sequence 20 BP; 4 A; 1 C; 13 G; 2 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
Qy 1331 CTGAAGAGGAGGAGAGGGG 1350
Db 1 CTGATGAGGAGGAGGAGGGG 20
RESULT 1290
AAD30329
ID AAD30329 standard; DNA; 20 BP.
XX
XX AAD30329;
XX
XX 17-MAY-2002 (first entry)
XX Human PKD1 gene mutation detecting nested PCR primer, 18F.
DE Human; PKD1 gene; autosomal dominant polycystic kidney disease; ADPKD;
XX acquired cystic disease; transgenic animal; PCR primer; ss.
KW
XX Homo sapiens.
XX
XX WO200206529-A2.
XX
XX 24-JAN-2002.
XX
XX 13-JUL-2001; 2001WO-US022035.
XX
XX 13-JUL-2000; 2000US-0218261P.
PR 13-APR-2001; 2001US-0283691P.
XX
XX (UYJO) UNIV JOHNS HOPKINS SCHOOL MEDICINE.
XX
XX Germino GG, Watnick TJ, Phakdeekitcharoen B;
PI WPI; 2002-179805/23.
XX
XX Novel primer for diagnosing polycystic kidney disease-associated
PT disorder, comprises regions having sequence that selectively hybridizes
PT to polycystic kidney disease gene sequence.
XX
XX Claim 6; Page 102; 192pp; English.
XX
XX The present invention relates to compositions and methods useful for the
CC identification and detection of polycystic kidney disease (PKD1) gene
CC mutations. The invention also relates to primers comprising a 5' region
CC having a sequence that selectively hybridises to a PKD1 gene sequence and
CC optionally, to a PKD1 homologue sequence and an adjacent 3' region having
CC a sequence that selectively hybridises to a PKD1 gene sequence and not to
CC a PKD1 homologue sequence. Primer pairs of the invention are useful for
CC detecting the presence or absence of a mutation in a PKD1 polynucleotide
CC in a sample, for identifying a subject at risk for a PKD1-associated
CC disorder such as autosomal dominant polycystic kidney disease (ADPKD) or
CC acquired cystic disease and for diagnosing a PKD1-associated disorder in
CC a subject. They are useful for selectively amplifying a region of a PKD1
CC gene. PKD1 DNA fragments are useful detecting the presence of a mutant
CC PKD1 polynucleotide in a sample, as a probe for an amplification
CC reaction, in hybridisation or amplification assays of biological samples
CC to detect abnormalities of PKD1 expression and for engineering transgenic
CC animals. The present sequence is a PCR primer used to detect mutation in
CC human PKD1 gene
XX
XX Sequence 20 BP; 2 A; 13 C; 1 G; 4 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
Qy 1694 GCCACCTTGCCACCCATTCT 1713
Db 1 GCCCCCTCACCACCCCTTCT 20


```

XX PF 05-MAR-2002; 2002WO-US006728.
XX PR 09-MAR-2001; 2001US-00802640.
XX PA (SEQU-) SEQUENOM INC.
XX PI Braun A, Bansal A, Kleya PW;
XX PS WPI; 2002-750478/81.
XX DR
XX PT Detecting the presence or absence of an allelic variant of a polymorphic
XX PT region of COX6B and/or GPT-1 gene, useful for detecting a predisposition
XX PT to high serum cholesterol, low serum HDL and cardiovascular disease.
XX PS Disclosure; Page 36; 199pp; English.
XX CC The invention comprises methods of detecting the presence or absence of
XX CC at least one allelic variant of a polymorphic region of a gene associated
XX CC with cardiovascular disease. The invention specifically relates to
XX CC detecting the region of a cytochrome C oxidase subunit VIb (COX6B) gene
XX CC that is associated with high serum cholesterol, or the region of the N-
XX CC acetylglucosaminyl transferase component glycosylphosphatidylinositol-1
XX CC (GPI-1) gene that is associated with low serum high density lipoprotein
XX CC (HDL). The methods of the invention are useful for detecting a
XX CC predisposition to high serum cholesterol, low serum HDL and
XX CC cardiovascular disease. The methods are also useful for elucidating
XX CC pathological pathways, developing diagnostic assays and new drug
XX CC therapies for such disorders. The present DNA sequence represents a PCR
XX CC primer used to amplify a human gene that is associated with high serum
XX CC cholesterol, low serum HDL and/or cardiovascular disease
XX SQ Sequence 20 BP; 2 A; 3 C; 7 G; 8 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 366 AGTATTCGATGGCTGTTTG 385
Db 1 AGTCTCTATGGCTGTTTG 20

RESULT 1294
ABX23287/c
ID ABX23287 standard; DNA; 20 BP.
XX AC ABX23287;
XX DT 09-APR-2002 (first entry)
XX DE Human Zmax1 cDNA forward PCR primer #225.
XX KW Human; mouse; Zmax1; HBM; high bone mass gene; lipid regulation; stroke;
XX KW lipid-associated condition; arteriosclerosis; cardiovascular disease; ss;
XX KW osteoporosis; atherosclerosis; diabetic atherosclerosis; plaque build-up;
XX KW neurovascular condition; wound healing; gene therapy; PCR primer; probe;
XX KW bone development disorder; antiarteriosclerotic; cardiovascular;
XX KW osteopathic; cerebroprotective.
XX OS Homo sapiens.
XX PN WO200192891-A2.
XX PD 06-DEC-2001.
XX PF 25-MAY-2001; 2001WO-US016946.
XX PR 26-MAY-2000; 2000US-00578900.
XX PA (GENO-) GENOME THERAPEUTICS CORP.
XX PA (UYCH-) UNIV CREIGHTON SCHOOL MEDICINE.
XX SQ

Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1273 CGCATCTCGATCTGCTCTC 1292
Db 20 CGCTTGGATCTCTCTCTC 1

RESULT 1295
AAD34878
ID AAD34878 standard; DNA; 20 BP.
XX AC AAD34878;
XX DT 16-JUL-2002 (first entry)
XX DE Human E2F transcription factor 2 antisense oligo, ISIS #114075.
XX KW Human; E2F transcription factor 2; hyperproliferative disorder; cancer;
XX KW developmental disorder; antisense; therapy; phosphorothioate backbone;
XX KW cytosstatic; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT modified_base 1..5
FT /*tag= b
FT /note= "Phosphorothioate backbone"
FT modified_base 1
FT /*tag= c
FT /mod_base= m5c
FT modified_base 2
FT /*tag= d
FT /mod_base= m5c
FT modified_base 3

```

```

PI Carulli JP, Little RD, Recker RR, Johnson ML;
XX WPI; 2002-097784/13.
XX PT Identifying molecules involved in lipid regulation, useful for
XX PT diagnosing, treating or preventing e.g., arteriosclerosis, comprises
XX PT identifying a molecule that binds to high bone mass gene or its
XX PT corresponding wild type gene.
XX PS Disclosure; Page 41; 409pp; English.
XX CC The invention relates to a method for identifying a molecule involved in
XX CC lipid regulation comprising identifying a molecule that binds to or
XX CC inhibits binding of a molecule to high bone mass (HBM) or its wild type
XX CC gene, Zmax1. Compounds identified by the method are useful for treating,
XX CC diagnosing, preventing or screening for normal and abnormal lipid-
XX CC associated conditions, including arteriosclerosis, cardiovascular
XX CC disease, stroke, and osteoporosis. The compounds may also be used in the
XX CC treatment or prevention of diabetic atherosclerosis, neurovascular
XX CC conditions caused by plaque build-up, poor circulation due to plaque
XX CC build-up and associated poor wound healing. The methods may be used in
XX CC gene therapy, pharmaceutical development, and diagnostic assays for bone
XX CC development disorders. Molecules identified by comparison of Zmax1 and
XX CC HBM systems can be used as surrogate markers in pharmaceutical
XX CC development, in diagnosis of human or animal bone disease, and in the
XX CC treatment of bone diseases. Sequences ABK22776-ABK23411 represent cDNA
XX CC molecules encoding human Zmax1 and HBM, and PCR primers, probes, linkers
XX CC and adapters of the invention
XX SQ Sequence 20 BP; 8 A; 4 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1273 CGCATCTCGATCTGCTCTC 1292
Db 20 CGCTTGGATCTCTCTCTC 1

RESULT 1295
AAD34878
ID AAD34878 standard; DNA; 20 BP.
XX AC AAD34878;
XX DT 16-JUL-2002 (first entry)
XX DE Human E2F transcription factor 2 antisense oligo, ISIS #114075.
XX KW Human; E2F transcription factor 2; hyperproliferative disorder; cancer;
XX KW developmental disorder; antisense; therapy; phosphorothioate backbone;
XX KW cytosstatic; ss.
XX OS Homo sapiens.
XX OS Synthetic.
XX FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT modified_base 1..5
FT /*tag= b
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT modified_base 1
FT /*tag= c
FT /mod_base= m5c
FT modified_base 2
FT /*tag= d
FT /mod_base= m5c
FT modified_base 3

```

FT FT /*tag= e
FT /mod_base= m5c
FT 6
FT /*tag= f
FT /mod_base= m5c
FT 9
FT /*tag= g
FT /mod_base= m5c
FT 10
FT /*tag= h
FT /mod_base= m5c
FT 15
FT /*tag= i
FT /mod_base= m5c
FT 16.20
FT /*tag= k
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT 16
FT /*tag= j
FT /mod_base= m5c

WO200220551-A1.

14-MAR-2002.

07-SEP-2001; 2001WO-US028202.

08-SEP-2000; 2000US-00658679.

(ISIS-) ISIS PHARM INC.

Popoff I, Wyatt JR;

WPI; 2002-329864/36.

XX New antisense oligonucleotides targeted to a nucleic acid encoding E2F
XX transcription factor 2, useful for treating a disease or condition
XX associated with E2F transcription factor 2, e.g. hyperproliferative
XX disorders, such as cancer.

Claim 3; Page 91; 120pp; English.

XX The present invention relates to antisense oligonucleotides, compounds
XX and methods for modulating the expression of E2F transcription factor 2.
XX The antisense oligonucleotides specifically hybridise with and inhibit
XX the expression of E2F transcription factor 2. They are useful for
XX inhibiting the expression of E2F transcription factor 2 and for treating
XX diseases or conditions associated with E2F transcription factor 2, such
XX as hyperproliferative disorders, particularly cancer and developmental
XX disorders. They may also be used as research reagents and diagnostics, to
XX distinguish between functions of various members of a biological pathway
XX and in the treatment of a disease or disorder which can be treated by
XX modulating the expression of E2F transcription factor 2. The oligomeric
XX compounds, particularly the antisense oligonucleotides may be used to
XX modulate the function of nucleic acid molecules encoding E2F
XX transcription factor 2, ultimately modulating the amount of E2F
XX transcription factor produced. Sequences of the invention are also used
XX in antisense therapy. The present DNA sequence is human E2F transcription
XX factor 2 antisense oligonucleotide with a phosphorothioate backbone. This
XX sequence is targetted to the coding region of human E2F transcription
XX factor 2

Sequence 20 BP; 5 A; 8 C; 7 G; 0 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1632 CCCAGGACAGAAACCAAGG 1651

|||||
Db 1 CCCAGCGCGGAGCAAGG 20

RESULT 1296

AAL38188

XX AAL38188 standard; DNA; 20 BP.

XX AC AAL38188;

XX 29-AUG-2003 (revised)

DT 15-AUG-2002 (first entry)

XX Human BH3 interacting domain death mRNA agonist inhibitor SEQ ID 31.

XX Hepatotropic; immunomodulatory; cytostatic; antiinflammatory; hepatitis;
KW haemostatic; BH3 interacting domain death agonist; liver disease;
KW haematopoietic disorder; developmental disorder; immunological disorder;
KW hyperproliferative disorder; apoptosis; human; chimeric; 2'-methoxyethyl;
KW 2'-MOE; phosphorothioate backbone; ds.

XX Homo sapiens.

OS Chimeric.

XX WO200220547-A1.

XX 14-MAR-2002.

XX 31-AUG-2001; 2001WO-US027316.

XX 07-SEP-2000; 2000US-00657346.

PR 07-MAR-2001; 2001US-00800631.

XX (ISIS-) ISIS PHARM INC.

XX Zhang H, Wyatt JR;

XX WPI; 2002-393838/42.

XX Novel antisense compound targeted to nucleic acid molecule encoding the
PT BH3 interacting domain death agonist, useful for treating animals with
PT diseases associated with BH3 interacting domain death agonist, e.g.
PT hepatitis.

Claim 3; Page 86; 171pp; English.

XX The invention relates to a compound 8 to 50 nucleotides in length
CC targeted to a nucleic acid molecule encoding a BH3 interacting domain
CC death agonist, where the compound specifically hybridises with and
CC inhibits the expression of the BH3 interacting domain death agonist. The
CC compound of the invention is useful for inhibiting the expression of the
CC BH3 interacting domain death agonist in cells or tissues. The compound is
CC also useful for treating an animal having a disease or condition
CC associated with the BH3 interacting domain death agonist, e.g.
CC haematopoietic disorder, hyperproliferative disorder, a developmental
CC disorder, immunological disorder, or a disease or condition of the liver
CC e.g., hepatitis, or a condition associated with apoptosis. The compound
CC is useful for diagnostics, therapeutics, prophylaxis and as research
CC reagents and kits. This polynucleotide sequence represents an antisense
CC oligonucleotide inhibitor of the DNA from human BH3 interacting domain
CC death agonist RNA of the invention. NOTE: This sequence is a chimeric
CC oligonucleotide 20 nucleotides in length, which is flanked on both sides
CC by five-nucleotide 'wings'. The wings are composed of 2'-methoxyethyl (2'
CC -MOE) nucleotides. The internucleoside (backbone) linkages are
CC phosphorothioate (P-S) throughout the oligonucleotide. (Updated on 29-AUG
CC -2003 to standardise OS field)

Sequence 20 BP; 5 A; 7 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 64 ATGGCGCAGACGCGGGCAC 83

|||||
Db 1 ACCGAGCAGCGCATGGCAC 20

```

RESULT 1297
ABL94389
ID ABL94389 standard; DNA; 20 BP.
XX
AC ABL94389;
XX
DT 29-JUL-2002 (first entry)
XX
DE Mouse C/EBP beta phosphorothioate antisense oligonucleotide, SEQ ID:155.
XX
KW Mouse; murine; C/EBP beta; CCAAT/enhancer-binding protein beta; C/EBP2;
KW LAP; TCF5; CRP2; NFIL6; IL6DBP; NF-M; AGP/EBP; Apc/EBP;
KW transcription factor; tissue development; cellular function;
KW proliferation; differentiation; hormone responsiveness;
KW oxidative stress response; IL-6 signalling mediator; interleukin-6;
KW carbohydrate metabolism; immunity; Th1 response; female fertility;
KW gluconeogenesis; ovarian; cancer; tumour formation; type II; diabetes;
KW infection; inflammation; expression inhibition; phosphorothioate;
KW antisense oligonucleotide; ss.
XX
OS Mus musculus.
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /*note= "Phosphorothioate linkages"
FT modified_base 1..5
FT /*tag= b
FT /mod_base= OTHER
FT /*note= "2'-methoxyethyl (2'-MOE) nucleotides. All 2' MOE
FT cytosines are 5-methylcytosine"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /*note= "2'-methoxyethyl (2'-MOE) nucleotides. All 2' MOE
FT cytosines are 5-methylcytosine"
XX
PN US6271030-B1.
XX
PD 07-AUG-2001.
XX
PF 14-JUN-2000; 2000US-00593711.
XX
PR 14-JUN-2000; 2000US-00593711.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Monia BP, Butler MM, Wyatt J;
XX
DR WPI; 2002-214451/27.
XX
PT Novel antisense compound targeted to nucleic acids encoding human or
PT mouse CCAAT/enhancer binding protein (C/EBP) beta, useful in vitro for
PT inhibiting expression of human or mouse C/EBP beta in cells/tissues.
XX
PS Example 17; Col 49-50; 69pp; English.
XX
CC Sequences ABL94252-ABL94476 represent antisense oligonucleotides targeted
CC to the human or mouse CCAAT/enhancer-binding protein alpha (C/EBP alpha)
CC gene, which inhibit its expression. The antisense oligonucleotides were
CC designed to target different regions of the human and/or mouse C/EBP
CC alpha RNA, and were analysed for their effect on C/EBP alpha mRNA levels
CC by quantitative real-time PCR. The C/EBP family of proteins are a family
CC of transcription factors which regulate the expression of a wide range of
CC genes that control normal tissue development, cellular function, cellular
CC proliferation and functional differentiation. C/EBP beta (also known as
CC C/EBP2, LAP, TCF5, CRP2, NFIL6, IL6DBP, NF-M, AGP/EBP and Apc/EBP)
CC primarily regulates hormone responsiveness and oxidative stress responses
CC and is a mediator of IL-6 (interleukin-6) signalling. C/EBP beta is
CC thought to be involved in carbohydrate metabolism, immunity, the Th1

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CC response, female fertility and gluconeogenic pathways. C/EBP beta is expressed in the liver, lung, spleen, kidney, brain, and testis, with the highest expression found in the lung. It is also expressed at a higher level in malignant ovarian tissue compared with normal ovarian tissue, and its expression in pancreas is upregulated in response to chronically elevated levels of glucose, indicating that it is involved in the impairment of insulin secretion in type II diabetes. The oligonucleotides of the invention are useful for diagnosis, prevention and treatment of conditions associated with C/EBP beta expression, such as cancer (particularly ovarian cancer), tumour formation, diabetes (particularly type II diabetes), infection, or inflammation

QY 1251 GGACGAAGACGACCTTGACA 1270
 ||||| ||||| ||||| |||||
 Db 1 GGACGACGACGACGTGACA 20

Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

RESULT 1298
 ABL54728/c
 ID ABL54728 standard; DNA; 20 BP.
 XX
 AC ABL54728;
 XX
 DT 06-JUN-2002 (first entry)
 XX
 DE Lactobacillus 23S rDNA oligonucleotide probe SEQ ID NO 48.
 XX
 KW Lactobacillus; Pediococcus; 23S rDNA; Lactobacillus brevis;
 KW Lactobacillus sp ABBC74; Lactobacillus lindneri; Lactobacillus plantarum;
 KW Pediococcus damnosus; probe; ss.
 XX
 OS Lactobacillus lindneri.
 XX
 PN JP2002034578-A.
 XX
 PD 05-FEB-2002.
 XX
 PF 31-JUL-2000; 2000JP-00230241.
 XX
 PR 31-JUL-2000; 2000JP-00230241.
 XX
 PA (ASAK) ASahi BREWERIES LTD.
 XX
 DR WPI; 2002-275725/32.
 XX
 PT Base sequence for detecting Lactobacillus genus microbes and Pediococcus genus microbes.
 XX
 PS Claim 4; Page 15; 25pp; Japanese.
 XX
 CC The invention relates to an oligonucleotide (ABL54681-ABL54761) which is a sequence targeting 23S rRNA and DNA. The probes are useful for determining the identification and the presence of Lactobacillus genus or Pediococcus genus microbes in a sample, especially Lactobacillus brevis, Lactobacillus sp. ABBC74, Lactobacillus lindneri, Lactobacillus plantarum and Pediococcus damnosus

QY 139 CAAGGCCCAATGAAGCC 158
 ||||| ||||| ||||| |||||
 Db 20 CAAAGCCTCGAATGAAGCC 1

Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

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RESULT 1299
ABK69495/c
ID ABK69495 standard; DNA; 20 BP.
XX
XX
AC ABK69495;
XX
XX 15-JUL-2002 (first entry)
XX
DE Rat phosphorylase kinase alpha-1 antisense oligonucleotide #1.
XX
KW Human; rat; antisense; phosphorylase kinase alpha 1; ss;
KW antiinflammatory; cytostatic; antimicrobial; antidiabetic;
KW metabolic disorder; diabetes; infection; inflammation; tumour; probe.
XX
XX Rattus sp.
OS Synthetic.
OS Chimeric.
XX
XX Key Location/Qualifiers
FT modified_base 1..20
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FT /mod_base= OTHER
FT /note= "OTHER = Phosphorothioate backbone, all cytidine
FT residues are 5-methyl cytidine"
FT modified_base 1..5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER = 2'-O-methoxyethyl"
FT modified_base 5..15
FT /*tag= c
FT /mod_base= OTHER
FT /note= "OTHER = 2' deoxynucleotide"
FT modified_base 15..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "OTHER = 2'-O-methoxyethyl"
XX
XX WO200220546-A1.
XX
XX 14-MAR-2002.
XX
XX 24-AUG-2001; 2001WO-US026608.
XX
XX 07-SEP-2000; 2000US-00657452.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Monia BP, Wyatt JR;
XX
XX WPI; 2002-351759/38.
XX
XX New antisense compound which is targeted to nucleic acid encoding
XX phosphorylase kinase alpha 1 and inhibits expression of kinase protein,
XX useful for treating a condition associated with kinase, e.g. diabetes.
XX
XX Claim 3; Page 90; 140pp; English.
XX
XX This invention relates to a novel antisense nucleic acid compound
XX targeted to a nucleic acid molecule encoding phosphorylase kinase alpha-1
XX which specifically hybridises with and inhibits expression of
XX phosphorylase kinase alpha-1. The compound of the invention is useful for
XX inhibiting the expression of phosphorylase kinase alpha-1 in cells or
XX tissues, and for treating an animal having a disease condition associated
XX with phosphorylase kinase alpha-1, e.g. a metabolic disorder such as
XX diabetes. The compounds are also useful prophylactically, e.g. to prevent
XX or delay infection, inflammation or tumour formation. The antisense
XX compounds are also useful as therapeutic, diagnostic and research
XX reagent, for distinguishing functions of various members of a biological
XX pathway, and in antisense gene therapy. The present sequence represents
XX an antisense oligonucleotide probe used to create the phosphorylase
XX kinase alpha-1 inhibiting compound of the invention
XX
```

```
SQ Sequence 20 BP; 5 A; 4 C; 9 G; 2 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
Qy 1994 TCTCCTAATCTCTGCAGGTGG 2013
Db 20 TCTCCTACCTCTGCAGCGG 1
RESULT 1300
ABX34052
ID ABX34052 standard; DNA; 20 BP.
XX
XX AC ABX34052;
XX
XX 10-FEB-2003 (first entry)
XX
XX Human cancer suppressing protein PP7882 PCR primer #2.
DE Human; primer; ss; cancer suppressing protein; cancer; PCR.
XX
XX OS Homo sapiens.
XX
XX EN CNI351081-A.
XX
XX 29-MAY-2002.
XX
XX 31-OCT-2000; 2000CN-00127102.
XX
XX 31-OCT-2000; 2000CN-00127102.
XX
XX (SHAN-) SHANGHAI INST ONCOLOGY.
XX
XX Gu J;
XX
XX WPI; 2002-609437/66.
XX
XX New human protein with cancer cell growth suppressing function and a
XX polynucleotide encoding it, for treating diseases, such as, cancer.
XX
XX Example 2; Page 11 (disclosure); 39pp; Chinese.
XX
XX This invention relates to the cDNA and protein sequences of a novel human
XX protein with cancer suppressing function. The invention also comprises a
XX method for preparing the polypeptide by recombination, and an application
XX of the polypeptide in treating diseases such as cancer, etc. Also
XX disclosed in an antagonist of the polypeptide and its medical action. The
XX present sequence represents a PCR primer used to amplify a cDNA encoding
XX a cancer suppressing protein of the invention
XX
XX Sequence 20 BP; 4 A; 6 C; 6 G; 4 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
Qy 1666 CAGCTGTGCTGGGTGAGCTC 1685
Db 1 CAGCTGGGCTAGATGACCTC 20
RESULT 1301
ABI96809
ID ABI96809 standard; DNA; 20 BP.
XX
XX AC ABI96809;
XX
XX 16-FEB-2002 (first entry)
XX
XX Capture oligonucleotide Zip ID#3896 oligo #9.
XX
```

KW Human; K-ras; PCR primer; probe; capture probe; mutation detection;
 KW ligase detection reaction; LDR; p53; BRCA2; infectious disease;
 KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
 KW oncogene; tumour suppressor; human papillomavirus; forensic;
 KW environmental monitoring; food industry; feed industry; ss.
 XX
 OS Synthetic.
 XX
 PN WO200179548-A2.
 XX
 PD 25-OCT-2001.
 XX
 PF 04-APR-2001; 2001WO-US010958.
 XX
 PR 14-APR-2000; 2000US-0197271P.
 XX
 PA (CORR) CORNELL RES FOUND INC.
 XX
 PI Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;
 XX
 DR WPI; 2002-034366/04.
 XX
 PT Designing capture oligonucleotide probes for use on a support to which
 PT complementary oligonucleotides hybridize with little mismatch.
 XX
 PS Example 5; Fig 29; 300pp; English.
 XX
 CC The present invention describes a method (M1) for designing capture
 CC oligonucleotide probes (I) for use on a support to which complementary
 CC oligonucleotide probes (II) will hybridize with little mismatch, where
 CC (I) have melting temperatures within a narrow range. The method is useful
 CC for detecting infectious diseases caused by bacterial infectious agents
 CC e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal
 CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and
 CC Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,
 CC Epstein-Barr virus and polio virus, and parasitic infectious agents
 CC selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus
 CC medinensis. The method is also useful for detecting genetic diseases such
 CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
 CC Detecting cancer involving oncogenes, tumour suppressor genes, or genes
 CC involved in DNA amplification, replication, recombination or repair, the
 CC cancer is specifically associated with a gene selected from BRCA1 gene,
 CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
 CC method is also used for environmental monitoring, forensics and the food
 CC and feed industry, detecting comprises scanning (using e.g. a scanning
 CC electron microscope and infrared microscope) the support at the
 CC particular sites and identifying if ligation of the oligonucleotide probe
 CC sets occurred and correlating (using a computer) identified ligation to a
 CC presence or absence of the target nucleotide sequences. ABI82074 to
 CC ABI97546 represent oligonucleotide sequences used in the exemplification
 CC of the present invention
 XX
 SQ Sequence 20 BP; 6 A; 6 G; 6 G; 2 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1250 AGGACGAGACGACCTGAC 1269
 Db 1 AGGACGAGAAATCGTCCGGAC 20
 RESULT 1302
 ABI94632/C
 ID ABI94632 standard; DNA; 20 BP.
 XX
 AC ABI94632;
 XX
 DT 16-FEB-2002 (first entry)
 XX
 DE Capture oligonucleotide Zip ID#1719 oligo #9.
 XX

KW Human; K-ras; PCR primer; probe; capture probe; mutation detection;
 KW ligase detection reaction; LDR; p53; BRCA2; infectious disease;
 KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
 KW oncogene; tumour suppressor; human papillomavirus; forensic;
 KW environmental monitoring; food industry; feed industry; ss.
 XX
 OS Synthetic.
 XX
 PN WO200179548-A2.
 XX
 PD 25-OCT-2001.
 XX
 PF 04-APR-2001; 2001WO-US010958.
 XX
 PR 14-APR-2000; 2000US-0197271P.
 XX
 PA (CORR) CORNELL RES FOUND INC.
 XX
 PI Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;
 XX
 DR WPI; 2002-034366/04.
 XX
 PT Designing capture oligonucleotide probes for use on a support to which
 PT complementary oligonucleotides hybridize with little mismatch.
 XX
 PS Example 5; Fig 29; 300pp; English.
 XX
 CC The present invention describes a method (M1) for designing capture
 CC oligonucleotide probes (I) for use on a support to which complementary
 CC oligonucleotide probes (II) will hybridize with little mismatch, where
 CC (I) have melting temperatures within a narrow range. The method is useful
 CC for detecting infectious diseases caused by bacterial infectious agents
 CC e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal
 CC infectious agents e.g. Cryptococcus neoformans, Candida albicans and
 CC Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,
 CC Epstein-Barr virus and polio virus, and parasitic infectious agents
 CC selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus
 CC medinensis. The method is also useful for detecting genetic diseases such
 CC as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
 CC Detecting cancer involving oncogenes, tumour suppressor genes, or genes
 CC involved in DNA amplification, replication, recombination or repair, the
 CC cancer is specifically associated with a gene selected from BRCA1 gene,
 CC p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
 CC method is also used for environmental monitoring, forensics and the food
 CC and feed industry, detecting comprises scanning (using e.g. a scanning
 CC electron microscope and infrared microscope) the support at the
 CC particular sites and identifying if ligation of the oligonucleotide probe
 CC sets occurred and correlating (using a computer) identified ligation to a
 CC presence or absence of the target nucleotide sequences. ABI82074 to
 CC ABI97546 represent oligonucleotide sequences used in the exemplification
 CC of the present invention
 XX
 SQ Sequence 20 BP; 4 A; 7 C; 5 G; 4 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 708 GGCTGGCAAGCGCAAGTATT 727
 Db 20 GGCTGGCTATGGCAAGCACT 1
 RESULT 1303
 ABI96997/C
 ID ABI96997 standard; DNA; 20 BP.
 XX
 AC ABI96997;
 XX
 DT 16-FEB-2002 (first entry)
 XX
 DE Capture oligonucleotide Zip ID#4084 oligo #9.
 XX

KW Human; K-ras; PCR primer; probe; capture probe; mutation detection;
 KW ligation detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
 KW infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer;
 KW oncogene; tumour suppressor; human papillomavirus; forensic;
 KW environmental monitoring; food industry; feed industry; ss.
 KW
 OS Synthetic.
 XX
 XX WO200179548-A2.
 XX
 XX 25-OCT-2001.
 XX
 XX 04-APR-2001; 2001WO-US010958.
 XX
 XX 14-APR-2000; 2000US-0197271P.
 XX
 XX (CORR) CORNELL RES FOUND INC.
 XX
 XX Barany F, Zirvi M, Gerry NP, Favis R, Kliman R;
 XX
 XX WPI; 2002-034366/04.
 XX
 XX Designing capture oligonucleotide probes for use on a support to which
 XX complementary oligonucleotides hybridize with little mismatch.
 XX
 XX Example 5; Fig 29; 30pp; English.
 XX
 XX The present invention describes a method (M1) for designing capture
 XX oligonucleotide probes (I) for use on a support to which complementary
 XX oligonucleotide probes (II) will hybridize with little mismatch, where
 XX (I) have melting temperatures within a narrow range. The method is useful
 XX for detecting infectious diseases caused by bacterial infectious agents
 XX e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal
 XX infectious agents e.g. Cryptococcus neoformans, Candida albicans and
 XX Aspergillus fumigatus, viruses e.g. T-cell lymphocytotropic virus,
 XX Epstein-Barr virus and polio virus, and parasitic infectious agents
 XX selected from Onchocerca volvulus, Entamoeba histolytica and Dracunculus
 XX medinensis. The method is also useful for detecting genetic diseases such
 XX as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
 XX Detecting cancer involving oncogenes, tumour suppressor genes, or genes
 XX involved in DNA amplification, replication, recombination or repair, the
 XX cancer is specifically associated with a gene selected from BRCA1 gene,
 XX p53 gene, human papillomavirus types 16 and 18 and liver cancers. The
 XX method is also used for environmental monitoring, forensics and the food
 XX and feed industry, detecting comprises scanning (using e.g. a scanning
 XX electron microscope and infrared microscope) the support at the
 XX particular sites and identifying if ligation of the oligonucleotide probe
 XX sets occurred and correlating (using a computer) identified ligation to a
 XX presence or absence of the target nucleotide sequences. ABI82074 to
 XX ABI97546 represent oligonucleotide sequences used in the exemplification
 XX of the present invention
 XX
 XX Sequence 20 BP; 4 A; 8 C; 4 G; 4 T; 0 U; 0 Other;
 XX
 Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 XX
 Qy 631 ACGGACCGGTCATGACTGT 650
 Db 20 ATGGACAGGTCATGGCGT 1
 XX
 RESULT 1304
 AA171040/c
 ID AA171040 standard; DNA; 20 BP.
 XX
 XX AA171040;
 AC
 XX
 XX 18-MAR-2002 (first entry)
 DT
 XX Forward primer flanking chromosome 6 D6S311 locus.
 DE
 KW

KW THW; tumour suppressor gene; human; breast cancer; melanoma; metastasis;
 KW diagnosis; dinucleotide repeat polymorphism; microsatellite DNA;
 KW chromosome 6; PCR primer; ss.
 XX
 OS Homo sapiens.
 XX
 XX Key Location/Qualifiers
 FT modified_base 1 /*tag= a
 FT /label= OTHER
 FT /note= "5", HEX"
 XX
 XX WO200190353-A1.
 XX
 XX 29-NOV-2001.
 XX
 XX 17-MAY-2001; 2001WO-EP005627.
 XX
 XX 19-MAY-2000; 2000EP-00110692.
 XX
 XX (HOFF) HOFFMANN LA ROCHE & CO AG F.
 XX
 XX Hildebrandt T, Van Muijen G, Weidie U;
 XX
 XX WPI; 2002-106197/14.
 XX
 XX Detecting nucleic acids in a sample for determining whether a cancer cell
 XX -containing test sample from a human has potential for tumor development,
 XX by using a THW nucleic acid down regulated in human tumors cells as
 XX probe.
 XX
 XX Example 4; Page 22; 42pp; English.
 XX
 XX The present sequence is the fluorescence-labelled forward primer of a
 XX primer pair (see also AA171041) that flanks the highly polymorphic
 XX dinucleotide repeat region at the D6S311 locus of human chromosome 6.
 XX Fluorescence labelled primers flanking D6S292, D6S1684 and D6S311 were
 XX used in a PCR analysis to study the incidence of allelic loss at 6q24 of
 XX various cell lines and tumour biopsies. The human tumour suppressor gene
 XX THW (see AA171033) is located on chromosome 6q. THW shows downregulated
 XX expression in tumour cells. A process for determining whether a cancer
 XX cell-containing test sample has potential for tumour development,
 XX progression or metastasis involves determining the approximate level of
 XX hybridisation of a probe comprising the THW gene to the sample. A test
 XX sample having no or low potential for tumour progression or metastasis
 XX will have a higher amount of the THW nucleic acid than does a cancer cell
 XX sample which has a high tumour progression potential or a metastatic
 XX potential
 XX
 XX Sequence 20 BP; 2 A; 3 C; 6 G; 9 T; 0 U; 0 Other;
 XX
 Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 XX
 Qy 1120 CAGACACGATGAGTACTT 1139
 Db 20 CACAACCAATGAGGACAT 1
 XX
 RESULT 1305
 ABK69310
 ID ABK69310 standard; DNA; 20 BP.
 XX
 XX ABK69310;
 AC
 XX
 XX 15-JUL-2002 (first entry)
 DT
 XX
 XX Chimeric phosphorothioate oligonucleotide #62 for caspase 9 inhibition.
 DE
 XX Antisense compound; caspase 9; C9; hyperproliferative disorder; stroke;
 KW haematopoietic disorder; cholesterol disorder; bone metabolism disorder;
 KW brain injury; neurodegenerative disease; infection; inflammation; tumour;
 KW

phosphorothioate backbone linkage; 2'-methoxyethyl; 2'-MOE; ss.

Homo sapiens.
Synthetic.
Chimeric.

Key	Location/Qualifiers
modified_base	1..20
	/*tag= b
	/mod_base= OTHER
	/note= "Phosphorothioate nucleotides, all cyt residues are 5-methylcytidines"
modified_base	1..5
	/*tag= a
	/mod_base= OTHER
	/note= "2'-methoxyethyl (2'-MOE) nucleotides"
modified_base	16..20
	/*tag= c
	/mod_base= OTHER
	/note= "2'-methoxyethyl (2'-MOE) nucleotides"

WO200222641-A1.

21-MAR-2002.

10-SEP-2001: 2001WO-US028233.

11-SEP-2000: 2000US-00659845.

(ISIS-) ISIS PHARM INC.

Zhang H, Watt AT;

WPI: 2002-351874/38.

New antisense oligonucleotide which modulates expression of caspase 9, useful to treat tumor, inflammation or to prevent infection in humans.

Claim 26: Page 92: 145pp: English.

The present invention relates to a new antisense compound targeted to a nucleic acid molecule encoding caspase 9 (C9). The compound specifically hybridises with and inhibits the expression of caspase 9. The invention also describes an antisense compound that specifically hybridises with an 8 nucleotide portion of an active site of the nucleic acid. The invention is useful for inhibiting the expression of C9 in cells or tissues and is also useful for treating an animal having a disease or condition associated with C9, including a hyperproliferative, haematopoietic or cholesterol disorder, bone metabolism disorder, stroke, brain injury or neurodegenerative disease. The compound is commonly useful as a research and diagnostics reagent. It is also useful to distinguish between functions of various members of a biological pathway. The invention is also be useful pharmacologically e.g. to prevent or delay infection, inflammation or tumour formation. The antisense compound of the invention is often preferred over native form because of enhanced cellular uptake, enhanced affinity for nucleic acid target and increased stability in presence of nucleases. The present nucleic acid sequence represents one of a collection (ABK69249-ABK69396) of chimeric phosphorothioate oligonucleotides having 2'-methoxyethyl (2'-MOE) wings. This sequence was used in the methods of the invention for inhibition of caspase 9.

Sequence 20 BP: 7 A: 6 C: 4 G: 3 T: 0 U: 0 Other:

every Match	0.7%	Score 13.6;	DB 1;	Length 20;
Best Local Similarity	80.0%;	Pred. No. 1.1e+03;		
Mismatches 16:	Conservative	0;	Mismatches 4;	Indels 0;
Gaps 0;				

153 GAAGCCTCACCGAATCCGCA 172

1 GGAGACTCACCAATCTGCA 20

RESULT 1306

SQ Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1682 GCTCTTCAGGAGCCACTT 1701
 Db 1 GATGTACCAGGAGCACTT 20

RESULT 1307
 ABN86953
 ID ABN86953 standard; DNA; 20 BP.
 AC ABN86953;
 XX
 XX 29-JUL-2002 (first entry)
 XX
 XX Human NOV7 forward PCR primer SEQ ID NO:72.
 DE
 XX Human; NOVX; cytostatic; antiarteriosclerotic; cardiovascular; lymphoma;
 KW anti-diabetic; immunosuppressive; neuroprotective; gene therapy; cancer;
 KW cardiomyopathy; atherosclerosis; cell signal processing; diabetes; AIDS;
 KW metabolic pathway modulation; neoplastic; neurological disorder; asthma;
 KW adenocarcinoma; prostate cancer; uterus cancer; immune response;
 KW Crohn's disease; multiple sclerosis; Graft versus host disease;
 KW PCR primer; ss.
 XX
 XX Homo sapiens.
 OS
 XX WO2002030974-A2.
 PN
 XX 18-APR-2002.
 PD
 XX 12-OCT-2001; 2001WO-US031922.
 PF
 XX 12-OCT-2000; 2000US-0240113P.
 PR 16-OCT-2000; 2000US-0240625P.
 PR 16-OCT-2000; 2000US-0240637P.
 PR 16-OCT-2000; 2000US-0240648P.
 PR 16-OCT-2000; 2000US-0240662P.
 PR 16-OCT-2000; 2000US-0240669P.
 PR 16-OCT-2000; 2000US-0240703P.
 PR 16-OCT-2000; 2000US-0240732P.
 PR 16-OCT-2000; 2000US-0241190P.
 PR 18-JAN-2001; 2001US-0262455P.
 XX
 XX (CURA-) CURAGEN CORP.
 PA (MILL/) MILLET I.
 PA
 XX Grosse WM, Alsobrook JP, Lepley DM, Burgess CE, Mishra V;
 FI Kekuda R, Li L, Padigaru M, Shinkets RA, Zerhusen BD, Spytek KA;
 PI Edinger S, Gerlach V, Macdougall J, Stone D, Gunther E, Ellerman K;
 XX WPI; 2002-444172/47.
 DR
 XX New NOVX polypeptides and polynucleotides, useful for treating or
 FT preventing a NOVX-associated disorder or a pathological state in a
 FT subject, particularly a human, e.g. cardiomyopathy, atherosclerosis,
 FT cancer or diabetes.
 FT
 XX Example 2; Page 205; 227pp; English.
 PS
 XX The present invention describes novel human proteins designated NOVX
 CC (where X is 1, 2a, 2b, 2c, 2d, 3, 4, 5, 6a, 6b, 7, 8, or 9). NOV1 is a
 CC tyrosine-protein kinase 6-like protein; NOV2a-d are keratin 4-like
 CC proteins; NOV3 is a collagen-like protein; NOV4 is a cystatin B-like
 CC protein; NOV5 is a serotonin receptor-like protein; NOV6a and NOV65v are
 CC cold inducible glycoprotein 30-like proteins; NOV7 is a matrilin-2-like
 CC protein; NOV8 is a leukocyte surface antigen (CD53)-like protein; and
 CC NOV9 is a tyrosine kinase-like protein. NOVX sequences have cytostatic,
 CC antiarteriosclerotic, cardiovascular, anti-diabetic, immunosuppressive and

CC neuroprotective activities, and can be used in gene therapy. The NOVX
 CC sequences can be used in therapeutics, particularly for treating,
 CC preventing or alleviating a NOVX-associated disorder or a pathological
 CC state in a subject, particularly a human. These disorders include
 CC cardiomyopathy, atherosclerosis, a disorder related to cell signal
 CC processing and metabolic pathway modulation or diabetes. The NOVX
 CC sequences are also useful for determining the presence of or
 CC predisposition to a disease associated with altered levels of NOVX
 CC polypeptide or nucleic acid, particularly cancer. The NOVX sequences are
 CC especially useful in therapeutic or prophylactic applications for
 CC neoplastic or neurological disorders, and in the treatment of
 CC adenocarcinoma, lymphoma, prostate cancer, uterus cancer, immune
 CC response, AIDS, asthma, Crohn's disease, multiple sclerosis or Graft
 CC versus host disease. The present sequence represents a PCR primer for
 CC human NOV7, which is used in an example from the present invention
 XX
 SQ Sequence 20 BP; 7 A; 1 C; 10 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1129 AATGAGTACCTGGAGAGAT 1148
 Db 1 AAGGAGGAGCTGGAGGAGAT 20

RESULT 1308
 ABS65096/C
 ID ABS65096 standard; DNA; 20 BP.
 XX
 AC ABS65096;
 XX
 XX 15-NOV-2002 (first entry)
 DT
 XX Human casein kinase 2-beta antisense oligonucleotide #34.
 DE
 XX ss; antisense; casein kinase2-beta; human; antisense gene therapy;
 KW cytostatic; anti-diabetic; anti-inflammatory; diabetes; cancer; tumour;
 KW hyperproliferative disorder; breast cancer; prostate cancer;
 KW liver cancer.
 XX
 XX Homo sapiens.
 OS
 XX Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "All cytidines are 5-methylcytidines"
 FT
 FT modified_base 1..20
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "Phosphorothioate backbone"
 FT
 FT modified_base 1..5
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "2'-methoxyethyl residues"
 FT
 FT modified_base 16..20
 FT /*tag= d
 FT /mod_base= OTHER
 FT /note= "2'-methoxyethyl residues"
 FT
 XX WO200262954-A2.
 EN
 XX 15-AUG-2002.
 PD
 XX 31-JAN-2002; 2002WO-US003159.
 PF
 XX 08-FEB-2001; 2001US-00780175.
 PR
 XX (ISIS-) ISIS PHARM INC.
 PA
 XX McKay R, Freier SM, Wyatt JR;
 PI

XX WPI; 2002-643409/69.

DR

XX New antisense oligonucleotides targeted to nucleic acid encoding Casein

PT kinase 2-beta, useful in diagnostic and research applications, or for

PT treating a disease or condition associated with the expression of Casein

PT kinase 2-beta.

XX

PS Claim 3; Page 92; 142pp; English.

XX

CC The invention relates to a compound that is 8 - 50 nucleobases in length

CC targeted to a nucleic acid molecule encoding Casein kinase 2-beta, and

CC which specifically hybridizes with and inhibits the expression of Casein

CC kinase 2-beta, or which specifically hybridizes with an 8-nucleobase

CC portion of an active site on a nucleic acid molecule encoding Casein

CC kinase 2-beta. Also included are: (1) a composition comprising the

CC compound, and a carrier or diluent; (2) inhibiting the expression of

CC Casein kinase 2-beta in cells or tissues by contacting the cells or

CC tissues with the compound so that the expression of Casein kinase 2-beta

CC is inhibited; and (3) treating an animal having a disease or condition

CC associated with Casein kinase 2-beta by administering to the animal the

CC new compound so that the expression of Casein kinase 2-beta is inhibited.

CC The antisense compounds are useful for modulating the expression of

CC Casein kinase 2-beta and for treating diseases or conditions associated

CC with expression of Casein kinase 2-beta, e.g. diabetes or

CC hyperproliferative disorders, particularly cancer, such as breast cancer,

CC prostate cancer, or liver cancer. The antisense compounds are also useful

CC for diagnostics, therapeutics, prophylaxis, e.g. to prevent or delay

CC infection, inflammation or tumour formation, as research reagents and

CC kits, and in distinguishing between functions of various members of a

CC biological pathway. The present sequence is an antisense oligonucleotide

CC of the invention targeting human casein kinase 2-beta

XX

SQ Sequence 20 BP; 4 A; 9 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1658 GCTCAGGAGGAGTGTGCTGG 1677

||||| | | | |

DB 20 GCTCAGGAGGAGTGTGCTGG 1

RESULT 1309

ABZ92931/C

ID ABZ92931 standard; DNA; 20 BP.

XX

AC ABZ92931;

XX

DT 17-OCT-2003 (first entry)

XX

DE Human oligonucleotide sequence.

XX

XX Human; antisense; lung dysfunction; nasal airway dysfunction;

KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;

KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;

KW antisense gene therapy; respiratory; lung; adenosine sensitivity;

KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;

KW lung inflammation; respiratory disease; ds.

XX

OS Homo sapiens.

XX

PN WO200285308-A2.

XX

XX 31-OCT-2002.

PD

XX

XX 23-APR-2002; 2002WO-US013135.

PF

XX

XX 24-APR-2001; 2001US-0286137P.

PR

XX

PA (EPIG-) EPIGENESIS PHARM INC.

XX

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;

PI Miller S, Tang L, Shahbuddin S;

XX

DR WPI; 2003-229219/22.

XX

PT Pharmaceutical composition for treating ailments associated with impaired

PT respiration, has oligo(s) antisense to specific gene(s) or its

PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or

PT ubiquinone.

XX

PS Disclosure; SEQ ID NO 8173; 872pp; English.

XX

CC The invention relates to a novel pharmaceutical composition, which has a

CC first active agent comprising an oligonucleotide antisense to the

CC initiation codon, coding region, 5' or 3' end genomic flanking regions,

CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of

CC junctions of genes encoding a polypeptide associated with lung and/or

CC nasal airway dysfunction and a second active agent comprising an

CC antiinflammatory steroid and ubiquinone. A composition of the invention

CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,

CC immunosuppressive, and cytostatic activity. The composition may have a

CC use in antisense gene therapy. The composition is useful for treating or

CC preventing a respiratory, lung or malignant disease or condition, also

CC for enhancing the prophylactic or therapeutic respiratory effect of an

CC antiinflammatory steroid in a subject, for reducing or depleting levels

CC of, or reducing sensitivity to adenosine, reducing levels of adenosine

CC receptor, producing bronchodilation, increasing levels of ubiquinone or

CC lung surfactant in a subject's tissue, or treating bronchoconstriction,

CC lung inflammation, lung allergies, or a respiratory disease or condition.

CC Note: The sequence data for this patent is not represented in the printed

CC specification, but was obtained in electronic format directly from WIPO

CC at ftp.wipo.int/pub/published_pct_sequences

XX

SQ Sequence 20 BP; 7 A; 5 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 781 ATTTCAAGCCGGTCATGTC 800

||||| | | | |

DB 20 ATTTGTAGCCGTCATGTC 1

RESULT 1310

ABZ85611/C

ID ABZ85611 standard; DNA; 20 BP.

XX

AC ABZ85611;

XX

DT 17-OCT-2003 (first entry)

XX

DE Human oligonucleotide sequence.

XX

XX Human; antisense; lung dysfunction; nasal airway dysfunction;

KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;

KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;

KW antisense gene therapy; respiratory; lung; adenosine sensitivity;

KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;

KW lung inflammation; respiratory disease; ds.

XX

OS Homo sapiens.

XX

PN WO200285308-A2.

XX

XX 31-OCT-2002.

PD

XX

XX 23-APR-2002; 2002WO-US013135.

PF

XX

XX 24-APR-2001; 2001US-0286137P.

PR

XX

PA (EPIG-) EPIGENESIS PHARM INC.

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PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
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XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 6472; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 8 A; 4 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1567 CCTCAGATTATTTATTTTC 1586
DB 20 CCTCAGATTGTGTTGC 1

RESULT 1313
ABZ88659
ID ABZ88659 standard; DNA; 20 BP.
XX
AC ABZ88659;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO20028308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
XX

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX
DR WPI; 2003-229219/22.
XX
PT Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
PS Disclosure; SEQ ID NO 6472; 872pp; English.
XX
CC The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 20 BP; 9 A; 6 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1966 AGAACACATGCGTCGCTCT 1985
DB 1 AGAACACATACCAGCCATCT 20

RESULT 1314
ABZ89007
ID ABZ89007 standard; DNA; 20 BP.
XX
AC ABZ89007;
XX
DT 17-OCT-2003 (first entry)
XX
DE Human oligonucleotide sequence.
XX
KW Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
OS Homo sapiens.
XX
PN WO200285308-A2.
XX
PD 31-OCT-2002.
XX
PF 23-APR-2002; 2002WO-US013135.
XX
PR 24-APR-2001; 2001US-0286137P.
XX
PA (EPIG-) EPIGENESIS PHARM INC.
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PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
XX respiration, has oligo(s) antisense to specific gene(s) or its
XX corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
XX ubiquinone.
XX
XX Disclosure; SEQ ID NO 4249; 872pp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
XX first active agent comprising an oligonucleotide antisense to the
XX initiation codon, coding region, 5' or 3' end genomic flanking regions,
XX 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
XX junctions of genes encoding a polypeptide associated with lung and/or
XX nasal airway dysfunction and a second active agent comprising an
XX antiinflammatory steroid and ubiquinone. A composition of the invention
XX has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
XX immunosuppressive, and cytostatic activity. The composition may have a
XX use in antisense gene therapy. The composition is useful for treating or
XX preventing a respiratory, lung or malignant disease or condition, also
XX for enhancing the prophylactic or therapeutic respiratory effect of an
XX antiinflammatory steroid in a subject, for reducing or depleting levels
XX of, or reducing sensitivity to adenosine, reducing levels of adenosine
XX receptor, producing bronchodilation, increasing levels of ubiquinone or
XX lung surfactant in a subject's tissue, or treating bronchoconstriction,
XX lung inflammation, lung allergies, or a respiratory disease or condition.
XX Note: The sequence data for this patent is not represented in the printed
XX specification, but was obtained in electronic format directly from WIPO
XX at ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 20 BP; 9 A; 3 C; 1 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 1606 ATAAATTTTATTAAATATA 1625
XX ||| ||||| ||||| |||||
XX Db 1 ATCAGATTCTCTAAATATA 20
XX
XX RESULT 1315
XX ABZ92579/c
XX ID ABZ92579 standard; DNA; 20 BP.
XX
XX AC ABZ92579;
XX
XX DT 17-OCT-2003 (first entry)
XX
XX DE Human oligonucleotide sequence.
XX
XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
XX antisense gene therapy; respiratory; lung; adenosine sensitivity;
XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
XX lung inflammation; respiratory disease; ds.
XX
XX OS Homo sapiens.
XX
XX FN WO200285308-A2.
XX
XX PD 31-OCT-2002.
XX
XX PF 23-APR-2002; 2002WO-US013135.
XX
XX PR 24-APR-2001; 2001US-0286137P.
XX
XX PA (EPIG-) EPIGENESIS PHARM INC.
XX
PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
XX respiration, has oligo(s) antisense to specific gene(s) or its
XX corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
XX ubiquinone.
XX
XX Disclosure; SEQ ID NO 4249; 872pp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
XX first active agent comprising an oligonucleotide antisense to the
XX initiation codon, coding region, 5' or 3' end genomic flanking regions,
XX 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
XX junctions of genes encoding a polypeptide associated with lung and/or
XX nasal airway dysfunction and a second active agent comprising an
XX antiinflammatory steroid and ubiquinone. A composition of the invention
XX has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
XX immunosuppressive, and cytostatic activity. The composition may have a
XX use in antisense gene therapy. The composition is useful for treating or
XX preventing a respiratory, lung or malignant disease or condition, also
XX for enhancing the prophylactic or therapeutic respiratory effect of an
XX antiinflammatory steroid in a subject, for reducing or depleting levels
XX of, or reducing sensitivity to adenosine, reducing levels of adenosine
XX receptor, producing bronchodilation, increasing levels of ubiquinone or
XX lung surfactant in a subject's tissue, or treating bronchoconstriction,
XX lung inflammation, lung allergies, or a respiratory disease or condition.
XX Note: The sequence data for this patent is not represented in the printed
XX specification, but was obtained in electronic format directly from WIPO
XX at ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 20 BP; 1 A; 8 C; 4 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 1126 ACGAATGAGTACCTGGAGAA 1145
XX ||| ||||| ||||| |||||
XX Db 20 ACCAGGGAGGACCTGGAGAA 1
XX
XX RESULT 1316
XX ABZ86044/c
XX ID ABZ86044 standard; DNA; 20 BP.
XX
XX AC ABZ86044;
XX
XX DT 17-OCT-2003 (first entry)
XX
XX DE Human oligonucleotide sequence.
XX
XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
XX antisense gene therapy; respiratory; lung; adenosine sensitivity;
XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
XX lung inflammation; respiratory disease; ds.
XX
XX OS Homo sapiens.
XX
XX FN WO200285308-A2.
XX
XX PD 31-OCT-2002.
XX
XX PF 23-APR-2002; 2002WO-US013135.
XX
XX PR 24-APR-2001; 2001US-0286137P.
XX
XX PA (EPIG-) EPIGENESIS PHARM INC.
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PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
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XX
XX WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
XX Disclosure; SEQ ID NO 4812; 872bp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 20 BP; 4 A; 7 C; 2 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 1857 GTGGCTGGGTCTTCAAGGAT 1876
XX ||||| ||||| ||||| |||||
XX 20 GTGGAAGAGACTTCAAGGAT 1
XX
XX RESULT 1319
XX ABZ92267/c
XX ID ABZ92267 standard; DNA; 20 BP.
XX
XX AC ABZ92267;
XX
XX DT 17-OCT-2003 (first entry)
XX
XX DE Human oligonucleotide sequence.
XX
XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
XX antisense gene therapy; respiratory; lung; adenosine sensitivity;
XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
XX lung inflammation; respiratory disease; ds.
XX
XX OS Homo sapiens.
XX
XX PN WO200285308-A2.
XX
XX PD 31-OCT-2002.
XX
XX PF 23-APR-2002; 2002WO-US013135.
XX
XX PR 24-APR-2001; 2001US-0286137P.
XX
XX PA (EPIG-) EPIGENESIS PHARM INC.
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XX
XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX Miller S, Tang L, Shahabuddin S;
XX
XX
XX WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
XX Disclosure; SEQ ID NO 4812; 872bp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
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CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 20 BP; 4 A; 7 C; 2 G; 7 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 1857 GTGGCTGGGTCTTCAAGGAT 1876
XX ||||| ||||| ||||| |||||
XX 20 GTGGAAGAGACTTCAAGGAT 1
XX
XX RESULT 1319
XX ABZ92267/c
XX ID ABZ92267 standard; DNA; 20 BP.
XX
XX AC ABZ92267;
XX
XX DT 17-OCT-2003 (first entry)
XX
XX DE Human oligonucleotide sequence.
XX
XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
XX antisense gene therapy; respiratory; lung; adenosine sensitivity;
XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
XX lung inflammation; respiratory disease; ds.
XX
XX OS Homo sapiens.
XX
XX PN WO200285308-A2.
XX
XX PD 31-OCT-2002.
XX
XX PF 23-APR-2002; 2002WO-US013135.
XX
XX PR 24-APR-2001; 2001US-0286137P.
XX
XX PA (EPIG-) EPIGENESIS PHARM INC.
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XX Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
XX Miller S, Tang L, Shahabuddin S;
XX
XX
XX WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
XX Disclosure; SEQ ID NO 7509; 872bp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
XX SQ Sequence 20 BP; 2 A; 6 C; 3 G; 9 T; 0 U; 0 Other;
XX
XX Query Match 0.7%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
XX QY 1482 AGGGTCAAGGAGGAGGTCA 1501
XX ||||| ||||| ||||| |||||
XX 20 AAGACTCAAGGAGGAGGTCA 1
XX
XX RESULT 1320
XX ABZ92596
XX ID ABZ92596 standard; DNA; 20 BP.
XX
XX AC ABZ92596;
XX
XX DT 17-OCT-2003 (first entry)
XX
XX DE Human oligonucleotide sequence.
XX
XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
XX antisense gene therapy; respiratory; lung; adenosine sensitivity;
XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
XX lung inflammation; respiratory disease; ds.
XX
XX OS Homo sapiens.
XX
XX PN WO200285308-A2.
XX
XX PD 31-OCT-2002.
XX
XX PF 23-APR-2002; 2002WO-US013135.
XX
XX PR 24-APR-2001; 2001US-0286137P.
XX
XX PA (EPIG-) EPIGENESIS PHARM INC.
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XX
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PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-229219/22.
 DR
 XX
 PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubi quinone.
 XX
 PS Disclosure; SEQ ID NO 7838; 872pp; English.
 XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
 CC antiinflammatory steroid and ubi quinone. A composition of the invention
 CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
 CC immunosuppressive, and cytostatic activity. The composition may have a
 CC use in antisense gene therapy. The composition is useful for treating or
 CC preventing a respiratory, lung or malignant disease or condition, also
 CC for enhancing the prophylactic or therapeutic respiratory effect of an
 CC antiinflammatory steroid in a subject, for reducing or depleting levels
 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
 CC receptor, producing bronchodilation, increasing levels of ubi quinone or
 CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 6 A; 7 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1472 CAGAGCCCAAGGGGTCAAG 1491
 |||||
 Db 1 CAGAGCCCAAGTGGCCAG 20

RESULT 1321
 ABZ85284
 ID ABZ85284 standard; DNA; 20 BP.
 XX
 AC ABZ85284;
 XX
 DT 17-OCT-2003 (first entry)
 XX
 DE Human oligonucleotide sequence.
 XX
 KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubi quinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX
 OS Homo sapiens.
 XX
 PN WO200285308-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013135.
 XX
 PR 24-APR-2001; 2001US-0286137P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX

PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
 PI Miller S, Tang L, Shahabuddin S;
 XX WPI; 2003-229219/22.
 DR
 XX
 PT Pharmaceutical composition for treating ailments associated with impaired
 PT respiration, has oligo(s) antisense to specific gene(s) or its
 PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
 PT ubi quinone.
 XX
 PS Claim 15; SEQ ID NO 526; 872pp; English.
 XX
 CC The invention relates to a novel pharmaceutical composition, which has a
 CC first active agent comprising an oligonucleotide antisense to the
 CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
 CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
 CC junctions of genes encoding a polypeptide associated with lung and/or
 CC nasal airway dysfunction and a second active agent comprising an
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 CC for enhancing the prophylactic or therapeutic respiratory effect of an
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 CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
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 CC lung inflammation, lung allergies, or a respiratory disease or condition.
 CC Note: The sequence data for this patent is not represented in the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences
 XX
 SQ Sequence 20 BP; 5 A; 9 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1085 TCAAGCTCCACATCAGTCTCT 1104
 |||||
 Db 1 TCCAGCTCCAGATCACACCT 20

RESULT 1322
 ABZ85669
 ID ABZ85669 standard; DNA; 20 BP.
 XX
 AC ABZ85669;
 XX
 DT 17-OCT-2003 (first entry)
 XX
 DE Human oligonucleotide sequence.
 XX
 KW Human; antisense; lung dysfunction; nasal airway dysfunction;
 KW antiinflammatory steroid; ubi quinone; antiinflammatory; antiallergic;
 KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
 KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
 KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
 KW lung inflammation; respiratory disease; ds.
 XX
 OS Homo sapiens.
 XX
 PN WO200285308-A2.
 XX
 PD 31-OCT-2002.
 XX
 PF 23-APR-2002; 2002WO-US013135.
 XX
 PR 24-APR-2001; 2001US-0286137P.
 XX
 PA (EPIG-) EPIGENESIS PHARM INC.
 XX

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PI Nyce JW, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX
XX WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
XX Claim 15; SEQ ID NO 911; 872bp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 20 BP; 0 A; 2 C; 0 G; 18 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1576 TTTATATTTCTATTCTCT 1595
Db 1 TTTTCTTTCTTTCTTTCT 20

RESULT 1323
ABZ91799/c
ID ABZ91799 standard; DNA; 20 BP.
XX
XX AC ABZ91799;
XX
XX DT 17-OCT-2003 (first entry)
XX
XX DE Human oligonucleotide sequence.
XX
XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
XX antisense gene therapy; respiratory; lung; adenosine sensitivity;
XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
XX lung inflammation; respiratory disease; ds.
XX
XX OS Homo sapiens.
XX
XX FN WO200285308-A2.
XX
XX PD 31-OCT-2002.
XX
XX PF 23-APR-2002; 2002WO-US013135.
XX
XX PR 24-APR-2001; 2001US-0286137P.
XX
XX PA (EPIG-) EPIGENESIS PHARM INC.
XX
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PI Nyce JW, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX
XX WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
XX Claim 15; SEQ ID NO 911; 872bp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 20 BP; 0 A; 2 C; 0 G; 18 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1576 TTTATATTTCTATTCTCT 1595
Db 1 TTTTCTTTCTTTCTTTCT 20

RESULT 1323
ABZ91799/c
ID ABZ91799 standard; DNA; 20 BP.
XX
XX AC ABZ91799;
XX
XX DT 17-OCT-2003 (first entry)
XX
XX DE Human oligonucleotide sequence.
XX
XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
XX antisense gene therapy; respiratory; lung; adenosine sensitivity;
XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
XX lung inflammation; respiratory disease; ds.
XX
XX OS Homo sapiens.
XX
XX FN WO200285308-A2.
XX
XX PD 31-OCT-2002.
XX
XX PF 23-APR-2002; 2002WO-US013135.
XX
XX PR 24-APR-2001; 2001US-0286137P.
XX
XX PA (EPIG-) EPIGENESIS PHARM INC.
XX
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PI Nyce JW, Li Y, Sandrasegura A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX
XX
XX WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
XX Disclosure; SEQ ID NO 7041; 872bp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 20 BP; 4 A; 3 C; 7 G; 6 T; 0 U; 0 Other;
XX
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 294 CTCATCGTCGACATAACA 313
Db 20 CTCATCTGTGCGACAAACA 1

RESULT 1324
ABZ85248/c
ID ABZ85248 standard; DNA; 20 BP.
XX
XX AC ABZ85248;
XX
XX DT 17-OCT-2003 (first entry)
XX
XX DE Human oligonucleotide sequence.
XX
XX KW Human; antisense; lung dysfunction; nasal airway dysfunction;
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
XX antisense gene therapy; respiratory; lung; adenosine sensitivity;
XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
XX lung inflammation; respiratory disease; ds.
XX
XX OS Homo sapiens.
XX
XX FN WO200285308-A2.
XX
XX PD 31-OCT-2002.
XX
XX PF 23-APR-2002; 2002WO-US013135.
XX
XX PR 24-APR-2001; 2001US-0286137P.
XX
XX PA (EPIG-) EPIGENESIS PHARM INC.
XX
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NYCE JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
Miller S, Tang L, Shahabuddin S;
WPI; 2003-229219/22.
Pharmaceutical composition for treating ailments associated with impaired
respiration, has oligo(s) antisense to specific gene(s) or its
corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
ubiquinone.
Disclosure; SEQ ID NO 6093; 872bp; English.
The invention relates to a novel pharmaceutical composition, which has a
first active agent comprising an oligonucleotide antisense to the
initiation codon, coding region, 5' or 3' end genomic flanking regions,
5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
junctions of genes encoding a polypeptide associated with lung and/or
nasal airway dysfunction and a second active agent comprising an
antiinflammatory steroid and ubiquinone. A composition of the invention
has antiinflammatory, antiasthmatic, hypotensive, and immunosuppressive,
and cytostatic activity. The composition is useful for treating or
preventing a respiratory, lung or malignant disease or condition, also
for enhancing the prophylactic or therapeutic respiratory effect of an
antiinflammatory steroid in a subject, for reducing or depleting levels
of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or
receptor, producing bronchodilation, increasing levels of ubiquinone or
lung surfactant in a subject's tissue, or treating bronchoconstriction,
lung inflammation, lung allergies, or a respiratory disease or condition.
Note: The sequence data for this patent is not represented in the printed
specification, but was obtained in electronic format directly from WIPO
at ftp.wipo.int/pub/published_pct_sequences
Sequence 20 BP; 8 A; 1 C; 1 G; 10 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1602 TTATATAAAATTTATTAA 1621
DB 20 TTTATATAACTTGATAAA 1
RESULT 1327
ABZ85215/c
ID ABZ85215 standard; DNA; 20 BP.
XX ABZ85215;
AC ABZ85215;
XX 17-OCT-2003 (first entry)
XX Human oligonucleotide sequence.
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiasthmatic;
XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
XX antisense gene therapy; respiratory; lung; adenosine sensitivity;
XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
XX lung inflammation; respiratory disease; ds.
XX Homo sapiens.
OS Homo sapiens.
XX WO200285308-A2.
XX 31-OCT-2002.
XX 23-APR-2002; 2002WO-US013135.
XX 24-APR-2001; 2001US-0286137P.
XX (EPIG-) EPIGENESIS PHARM INC.
XX

NYCE JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
Miller S, Tang L, Shahabuddin S;
WPI; 2003-229219/22.
Pharmaceutical composition for treating ailments associated with impaired
respiration, has oligo(s) antisense to specific gene(s) or its
corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
ubiquinone.
Claim 15; SEQ ID NO 457; 872bp; English.
The invention relates to a novel pharmaceutical composition, which has a
first active agent comprising an oligonucleotide antisense to the
initiation codon, coding region, 5' or 3' end genomic flanking regions,
5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
junctions of genes encoding a polypeptide associated with lung and/or
nasal airway dysfunction and a second active agent comprising an
antiinflammatory steroid and ubiquinone. A composition of the invention
has antiinflammatory, antiasthmatic, hypotensive, and immunosuppressive,
and cytostatic activity. The composition is useful for treating or
preventing a respiratory, lung or malignant disease or condition, also
for enhancing the prophylactic or therapeutic respiratory effect of an
antiinflammatory steroid in a subject, for reducing or depleting levels
of, or reducing sensitivity to adenosine, reducing levels of ubiquinone or
receptor, producing bronchodilation, increasing levels of ubiquinone or
lung surfactant in a subject's tissue, or treating bronchoconstriction,
lung inflammation, lung allergies, or a respiratory disease or condition.
Note: The sequence data for this patent is not represented in the printed
specification, but was obtained in electronic format directly from WIPO
at ftp.wipo.int/pub/published_pct_sequences
Sequence 20 BP; 5 A; 7 C; 5 G; 3 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1012 GCTGTGGCCCTGGATACGA 1031
DB 20 GCTGTGTACCTGGACTCGA 1
RESULT 1328
ABZ88290/c
ID ABZ88290 standard; DNA; 20 BP.
XX ABZ88290;
AC ABZ88290;
XX 17-OCT-2003 (first entry)
XX Human oligonucleotide sequence.
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
XX antiinflammatory steroid; ubiquinone; antiinflammatory; antiasthmatic;
XX antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
XX antisense gene therapy; respiratory; lung; adenosine sensitivity;
XX adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
XX lung inflammation; respiratory disease; ds.
XX Homo sapiens.
OS Homo sapiens.
XX WO200285308-A2.
XX 31-OCT-2002.
XX 23-APR-2002; 2002WO-US013135.
XX 24-APR-2001; 2001US-0286137P.
XX (EPIG-) EPIGENESIS PHARM INC.
XX

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PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
XX Disclosure; SEQ ID NO 3532; 872pp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 20 BP; 2 A; 9 C; 5 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1664 GGCAGCTGCTGGTGAGC 1683
DB 20 GGCAGCTGTCAGCAGGAGC 1
RESULT 1329
ABZ87753
ID ABZ87753 standard; DNA; 20 BP.
XX
XX ABZ87753;
DT 17-OCT-2003 (first entry)
DE Human oligonucleotide sequence.
XX
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
XX Homo sapiens.
OS
XX WO200285308-A2.
PN
XX 31-OCT-2002.
PD
XX 23-APR-2002; 2002WO-US013135.
PF
XX 24-APR-2001; 2001US-0286137P.
PR
XX (EPIG-) EPIGENESIS PHARM INC.
PA
XX
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PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
XX Disclosure; SEQ ID NO 3532; 872pp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 20 BP; 2 A; 9 C; 5 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1664 GGCAGCTGCTGGTGAGC 1683
DB 20 GGCAGCTGTCAGCAGGAGC 1
RESULT 1330
ABZ92286/C
ID ABZ92286 standard; DNA; 20 BP.
XX
XX ABZ92286;
DT 17-OCT-2003 (first entry)
DE Human oligonucleotide sequence.
XX
XX Human; antisense; lung dysfunction; nasal airway dysfunction;
KW antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
KW antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy;
KW antisense gene therapy; respiratory; lung; adenosine sensitivity;
KW adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
KW lung inflammation; respiratory disease; ds.
XX
XX Homo sapiens.
OS
XX WO200285308-A2.
PN
XX 31-OCT-2002.
PD
XX 23-APR-2002; 2002WO-US013135.
PF
XX 24-APR-2001; 2001US-0286137P.
PR
XX (EPIG-) EPIGENESIS PHARM INC.
PA
XX
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PI Nyce JW, Li Y, Sandrasagra A, Katz E, Pabalan J, Aguilar D;
PI Miller S, Tang L, Shahabuddin S;
XX WPI; 2003-229219/22.
XX
XX Pharmaceutical composition for treating ailments associated with impaired
PT respiration, has oligo(s) antisense to specific gene(s) or its
PT corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
PT ubiquinone.
XX
XX Disclosure; SEQ ID NO 7109; 872pp; English.
XX
XX The invention relates to a novel pharmaceutical composition, which has a
CC first active agent comprising an oligonucleotide antisense to the
CC initiation codon, coding region, 5' or 3' end genomic flanking regions,
CC 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of
CC junctions of genes encoding a polypeptide associated with lung and/or
CC nasal airway dysfunction and a second active agent comprising an
CC antiinflammatory steroid and ubiquinone. A composition of the invention
CC has antiinflammatory, antiallergic, antiasthmatic, hypotensive,
CC immunosuppressive, and cytostatic activity. The composition may have a
CC use in antisense gene therapy. The composition is useful for treating or
CC preventing a respiratory, lung or malignant disease or condition, also
CC for enhancing the prophylactic or therapeutic respiratory effect of an
CC antiinflammatory steroid in a subject, for reducing or depleting levels
CC of, or reducing sensitivity to adenosine, reducing levels of adenosine
CC receptor, producing bronchodilation, increasing levels of ubiquinone or
CC lung surfactant in a subject's tissue, or treating bronchoconstriction,
CC lung inflammation, lung allergies, or a respiratory disease or condition.
CC Note: The sequence data for this patent is not represented in the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
XX Sequence 20 BP; 10 A; 3 C; 3 G; 4 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1884 TTTTTCAGGCTCCTAAGT 1903
Db TTTTTCAGGCTTACAGT 1
RESULT 1333
ABZ75974
ID ABZ75974 standard; DNA; 20 BP.
XX
XX AC ABZ75974;
DT 29-MAY-2003 (first entry)
XX
XX TNFalpha gene targeting oligonucleotide ISIS 28089.
DE
XX ICAM-1; desulphurization; antioxidant; TNFalpha; antisense; ss.
XX
XX Synthetic.
XX
XX WO2003005822-A1.
PN
XX 23-JAN-2003.
PD
XX 11-JUL-2002; 2002WO-US022038.
PF
XX 11-JUL-2001; 2001US-00902953.
PR
XX (ISIS-) ISIS PHARM INC.
PA
XX Krotz AH, Mehta R;
PI
XX WPI; 2003-229426/22.
DR
XX Preventing desulfurization of oligonucleotide comprising phosphorothioate

PT linkages in bi-phasic/multi-phasic formulation, by adding to formulation
PT an antioxidant that partitions into aqueous phase of the formulation.
XX
XX Disclosure; Page 23; 51pp; English.
XX
XX The invention relates to preventing desulphurization of an
CC oligonucleotide or its bioequivalent comprising one or more
CC phosphorothioate linkages in a bi-phasic or multi-phasic formulation. The
CC method involves including in the formulation an antioxidant which
CC partitions into the aqueous phase of the formulation. The method is
CC useful for increasing the stability of oligonucleotide comprising
CC phosphorothioate linkages. Sequences ABZ75968-976 represent specific
CC oligonucleotides that target genes and that may be employed in the
CC formulations of the present invention
XX
XX Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 845 GTGGCTCAGACTCCCTATCT 864
Db GTGGCTCAGACACCTATCT 20
RESULT 1334
ACC49177
ID ACC49177 standard; DNA; 20 BP.
XX
XX AC ACC49177;
XX
XX 19-JUN-2003 (first entry)
DT
DE TNF-alpha inhibitory antisense oligonucleotide SEQ ID NO:9.
XX
XX Inhibition; phosphorothioate; delayed release oral formulation;
KW enhanced gastrointestinal absorption; ulcerative colitis;
KW rheumatoid arthritis; Crohn's disease; inflammatory bowel disease;
KW abnormal cellular proliferation; ss.
XX
XX Synthetic.
XX
XX Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate linkages"
XX
XX WO2003017940-A2.
PN
XX 06-MAR-2003.
PD
XX 22-AUG-2002; 2002WO-US026924.
PF
XX 22-AUG-2001; 2001US-00944493.
PR
XX (ISIS-) ISIS PHARM INC.
PA
XX Weinbach SP, Tillman LG, Geary RS, Hardee GE;
PI
XX WPI; 2003-354422/33.
DR
XX Pulsed release oral formulation providing enhanced gastrointestinal
PT absorption, comprises first particles containing drug and penetration
PT enhancer and second particles containing delayed release penetration
PT enhancer.
XX
XX Disclosure; Page 28; 59pp; English.
PS
XX The present invention describes a delayed release oral formulation (A),
CC giving enhanced gastrointestinal (GI) absorption of a drug (I). (A)
CC comprises a first set of particles containing (I) and a penetration

CC enhancer (II) and a second set of particles containing (II) in a delayed
 CC release coating or matrix (III). (A) is used for enhancing the absorption
 CC of (I) in mammals, especially humans. Typical disorders to be treated
 CC include ulcerative colitis, rheumatoid arthritis, Crohn's disease,
 CC inflammatory bowel disease and abnormal cellular proliferation. When the
 CC particles release (I) and (II) at a first location in the GI tract
 CC (generally the intestines), (II) is rapidly absorbed (during a first
 CC release pulse) and is often present in insufficient amount to promote
 CC absorption of the entire dose of (I). This problem is solved by providing
 CC further (II) in delayed release form in the particles, so that absorption
 CC of (I) is completed in a second pulse. The present sequence represents an
 CC exemplary oligonucleotide from the present invention which inhibits TNF-
 CC alpha
 XX
 SQ Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 845 GTGGCTCAGACTCCCTATCT 864
 ||| ||||| ||||| |||||
 Db 1 GTGTGCCAGACACCCATCT 20

RESULT 1335
 ADA19180/C
 ID ADA19180 standard; DNA; 20 BP.

XX AC ADA19180;

XX XX 20-NOV-2003 (first entry)

XX DE Human IRM10 gene 5'UTR polymorphic site forward PCR primer.

XX KW Insulin resistance; IR; susceptibility; diagnosis;
 KW insulin resistance marker; IRM; polymorphism; genotype; hypertension;
 KW dyslipidaemia; type 2 diabetes; obesity; coronary artery disease;
 KW drug screening; antidiabetic; cardiant; antilipaeamic; hypotensive; human;
 KW IRM10; hypothetical protein FLJ22297; single nucleotide polymorphism;
 KW SNP; PCR; primer; ss.

XX OS Homo sapiens.

XX XX W0200298355-A2.

XX PD 12-DEC-2002.

XX PF 03-JUN-2002; 2002WO-US017227.

XX PR 01-JUN-2001; 2001US-0295264P.

XX PA (CLIN-) CLINGENIX INC.

XX PI Ma Y, Lih C, Chen F, Fairman J, Chen YI;

XX DR WPI; 2003-148601/14.

XX PT Diagnosing for insulin resistance (IR) an IR-related condition, e.g.
 PT hypertension, diabetes or obesity, comprises detecting an altered or a
 PT difference in expression of insulin resistance marker (IRM) genes in a
 PT sample from the subject.

XX PS Disclosure; Page 67; 125pp; English.

XX CC The invention relates to a method for diagnosing insulin resistance (IR),
 CC an IR-related condition, or susceptibility to IR or an IR-related
 CC condition in a patient. The method comprises detecting a difference in
 CC expression of at least one insulin resistance marker (IRM) in a
 CC biological sample from the patient, compared to the level of expression
 CC of the IRM in reference individuals who are not insulin resistant. The
 CC invention also encompasses screening for an agent to determine its
 CC usefulness in treating IR; the identification of a polymorphism

CC associated with an IR phenotype or risk of developing IR; estimating the
 CC frequency of a haplotype for a set of nucleotide polymorphism markers in
 CC a population; detecting an association between a haplotype and a
 CC phenotype; and identifying genes associated with a disease state. The
 CC methods of the invention are useful for diagnosing insulin resistance
 CC (IR), an IR-related condition, or susceptibility to IR or an IR-related
 CC condition. Such conditions include hypertension, dyslipidaemia, type 2
 CC diabetes, obesity or coronary artery disease. The methods are also useful
 CC in screening for agents useful in the treatment of these disorders.
 CC Sequences ADA19180-ADA19181 represent PCR primers used to amplify a
 CC fragment of a human insulin resistance marker designated IRM 10 Sequences
 CC ADA19180-ADA19181 represent PCR primers used to amplify a fragment
 CC (ADA19178) of a human insulin resistance marker designated IRM10, which
 CC corresponds to the gene encoding the hypothetical protein FLJ22297. This
 CC fragment contains a polymorphic site at a position corresponding to
 CC position -167 (5'UTR) of the FLJ22297 gene.

XX SQ Sequence 20 BP; 10 A; 2 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1871 AAGGATCTCTCTGTTTTC 1890
 ||| ||||| ||||| |||||
 Db 20 AATGATCTCTGCTTTTC 1

RESULT 1336

ABX33949/C

ID ABX33949 standard; DNA; 20 BP.

XX AC ABX33949;

XX XX 10-FEB-2003 (first entry)

XX DE Human interleukin 12 p40 subunit antisense oligonucleotide ISIS #139122.

XX KW Human; ss; antisense; interleukin 12 p40 subunit; antibacterial;
 KW antiinflammatory; cytostatic; infection; inflammation; tumour.

XX OS Homo sapiens.

XX PH Key Location/Qualifiers

FT modified_base 1..20

FT /tag= a

FT /mod_base= OTHER

FT /note= "All cytosines are 5-methylcytidines and the

FT nucleotides are linked via a phosphorothioate backbone"

FT modified_base 1..5

FT /tag= b

FT /mod_base= OTHER

FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"

FT modified_base 16..20

FT /tag= c

FT /mod_base= OTHER

FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"

XX US6448081-B1.

XX PD 10-SEP-2002.

XX PF 07-MAY-2001; 2001US-00851062.

XX PR 07-MAY-2001; 2001US-00851062.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Baker BF, Freier SM;

XX XX WPI; 2003-074100/07.

XX PT New antisense chimeric oligonucleotide, useful for modulating the

PT expression of human Interleukin 12 p40 subunit, in treating or preventing
PT disease states in humans and animals, and as research reagents and
PT diagnostics.

XX Example 15; Col 45; 42pp; English.

CC The invention relates to an antisense compound 20-50 nucleobases in
CC length targeted to a start codon region, coding region, a stop codon
CC region or a 3' untranslated region of a nucleic acid molecule encoding
CC human Interleukin 12 p40 subunit. The compound specifically hybridizes
CC with one of the regions and inhibits the expression of human Interleukin
CC 12 p40 subunit. The new compound is useful for inhibiting the expression
CC of human Interleukin 12 p40 subunit in cells or tissues and comprises
CC contacting the cells or tissues in vitro with the compound, so that
CC expression of the human Interleukin 12 p40 subunit is inhibited. The
CC antisense compound may also be used as research reagents and diagnostics,
CC and as treatment or prevention of disease states, e.g. to prevent or
CC delay infection, inflammation or tumour formation, in animals and humans.
CC The present sequence is an antisense oligonucleotide of the invention

XX Sequence 20 BP; 5 A; 7 C; 4 G; 4 T; 0 U; 0 Other;

SQ Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 533 TCTTGCCCATCTCGGAACGTG 552

Db 20 TCGTGCCCATGTGGGAACGTG 1

RESULT 1337

ADA26897
ID ADA26897 standard; DNA; 20 BP.

XX ADA26897;

XX AC

XX 20-NOV-2003 (first entry)

DT Human PRL-3 reverse PCR primer #181, used in gene mapping.

DE Metastasis; neoplastic growth; detection; prediction;

XX neoplastic growth marker; drug screening; cancer; tumour;

KW gastrointestinal; prostate; breast; colorectal; diagnostic imaging;

KW drug targeting; chromosome 8q24.3; human;

KW protein tyrosine phosphatase type IVA member 3; PRL-3; gene mapping;

XX cytostatic; PCR; primer; ss.

XX Homo sapiens.

OS

XX WO2003031930-A2.

PN

XX 17-APR-2003.

PD

XX 02-OCT-2002; 2002WO-US031247.

PF

XX 09-OCT-2001; 2001US-0327332P.

PR

XX (UYJO) UNIV JOHNS HOPKINS.

XX PA

XX Vogelstein B, Kinzler KW, Saha S, Bardelli A;

XX WPI; 2003-393457/37.

XX DR

XX Identifying regions of neoplastic growth in a human body, useful for

XX detecting or predicting metastasis, comprises administering to the human

XX body an antibody or peptide that specifically binds to a protein marker

XX of neoplastic growth.

XX PS Disclosure; Page 23; 42pp; English.

XX CC The invention relates to methods for identifying regions of neoplastic

XX growth in a human patient, especially for detecting or predicting

CC metastasis. The methods involve determining whether a neoplastic growth
CC marker protein is overexpressed, either by the use of an antibody
CC specific for the protein, or by the use of PCR or hybridisation to detect
CC nucleic acids encoding the marker proteins. A set of neoplastic growth
CC markers are disclosed (SAGE (serial analysis of gene expression) tags for
CC these are given in ADA26759-ADA26796), with protein tyrosine phosphatase
CC type IVA member 3 (also known as PRL-3) being a preferred neoplastic
CC growth marker. The neoplastic growth markers are specifically expressed
CC at a higher level in metastatic cancers, compared with advanced and early
CC stage cancers and normal cells from which the cancer is derived.
CC Overexpression of the neoplastic growth markers is taken as an indication
CC that the tissue has a propensity to metastasise. The invention also
CC encompasses methods for treating a patient with an advanced or metastatic
CC cancer, and for identifying candidate drugs for treating advanced or
CC metastatic cancers. The methods of the invention are useful for
CC identifying regions of neoplastic growth, for detecting or predicting
CC metastasis, or identifying candidate drugs for treating advanced or
CC metastatic cancers. The invention is particularly applicable to
CC gastrointestinal, prostate, breast or colorectal cancers. Antibodies
CC which bind to the neoplastic growth marker proteins are additionally
CC useful for diagnostic imaging and for targeting cytotoxic or
CC chemotherapeutic drugs. The present sequence represents a PCR primer used
CC to map the PRL-3 gene to chromosome 8q24.3.

XX Sequence 20 BP; 4 A; 8 C; 3 G; 5 T; 0 U; 0 Other;

SQ Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 142 GGCCACCCCAATGAAGCCTCA 161

Db 1 GGTCCACCATTTAGCCTCA 20

RESULT 1338

ABT34269

ID ABT34269 standard; DNA; 20 BP.

XX ABT34269;

XX 12-JUN-2003 (first entry)

DT Serotonin receptor 1D PCR primer SEQ ID No 55.

DE Eating disorder; polymorphism; dataset; allele; HGBASE identification;

KW serotonin receptor 1D; delta-opioid receptor; dopamine receptor D2;

KW anorexia nervosa; bulimia nervosa; PCR; primer; ss.

XX Unidentified.

OS

XX WO2003012143-A1.

PN

XX 13-FEB-2003.

PD

XX 16-JUL-2002; 2002WO-US022555.

PF

XX 16-JUL-2001; 2001US-0305153P.

PR

XX 20-JUL-2001; 2001US-0306440P.

XX 13-NOV-2001; 2001US-0331285P.

XX 19-DEC-2001; 2001US-0340843P.

XX 19-DEC-2001; 2001US-0340844P.

XX (PRIC-) PRICE FOUND LTD.

XX PA

XX Bergen AW, Yeager M;

XX WPI; 2003-268122/26.

XX DR

XX New nucleic acid molecule having polymorphisms in the serotonin receptor

XX 1D, delta-opioid receptor, or dopamine receptor D2, useful in diagnostic

XX PT and prognostic assays for eating disorders, such as anorexia and bulimia

XX PT nervosa.

XX PS Example 3; Page 60; 149pp; English.

XX CC The invention relates to a novel isolated nucleic acid molecule comprising a variant gene associated with an eating disorder and selected from any of 119 polymorphisms with their corresponding genotyping in dataset, alleles and HBASE identification, given in the specification.

XX CC The novel nucleic acid molecule has polymorphisms in the serotonin receptor 1D, delta-opioid receptor, or dopamine receptor D2, which is useful in diagnostic and prognostic assays for eating disorders, in particular anorexia nervosa and bulimia nervosa. This polynucleotide sequence represents a serotonin receptor 1D PCR primer of the invention

XX CC

XX SQ Sequence 20 BP; 8 A; 2 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1757 GAAGGGGATCTTTTATGCA 1776

Db 1 GAAGGGGACATTTTCTGAA 20

RESULT 1339

ACC49166

ID ACC49166 standard; DNA; 20 BP.

XX AC ACC49166;

XX DT 19-JUN-2003 (first entry)

XX DE TNF-alpha inhibitory antisense oligonucleotide SEQ ID NO:9.

XX KW Inhibition; antisense oligonucleotide; phosphorothioate; bioadhesive; enhanced mucosal drug absorption; antiulcer; antiinflammatory; cancer; antiarthritis; cyostatic; ulcerative colitis; tumor; rheumatoid arthritis; Crohn's disease; inflammatory bowel disease; cellular proliferation; ss.

XX OS Synthetic.

XX FH Key Location/Qualifiers

FT modified_base 1..20

FT /*tag= a

FT /mod_base= OTHER

FT /note= "phosphorothioate linkages"

FT modified_base 1..4

FT /*tag= b

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyls"

FT modified_base 6..7

FT /*tag= c

FT /mod_base= m5c

FT /note= "5-methylcytidines"

FT modified_base 11

FT /*tag= d

FT /mod_base= m5c

FT /note= "5-methylcytidine"

FT modified_base 13..15

FT /*tag= e

FT /mod_base= m5c

FT /note= "5-methylcytidines"

FT modified_base 17..20

FT /*tag= f

FT /mod_base= OTHER

FT /note= "2'-O-methoxyethyls"

FT modified_base 19

FT /*tag= g

FT /mod_base= m5c

FT /note= "5-methylcytidine"

XX PN W02003018134-A2.

XX ED 06-MAR-2003.

XX PF 22-AUG-2002; 2002WO-US026925.

XX PR 22-AUG-2001; 2001US-00935316.

XX XX (ISIS-) ISIS PHARM INC.

XX FA Teng C, Weinbach SP, Tillman LG, Geary RS, Hardee GE;

XX PI WPI; 2003-342432/32.

XX DR Oral pharmaceutical formulation for delivering bioactive macromolecule to mucosal surface, contains drug, bioadhesive compound, and penetration enhancer.

XX FT Disclosure; Page 28; 62pp; English.

XX PS The present invention describes an oral pharmaceutical formulation (I) for delivering a bioactive macromolecule to a mucosal surface. (I) comprises a first population of carrier particles comprising drug and a bioadhesive compound; and a second population of carrier particles comprising a penetration enhancer. Also described is a method for enhancing the mucosal absorption of the bioactive macromolecule in a mammal (preferably a human) by mucosally administering (I). (I) has antiulcer, antiinflammatory, antirheumatic, antiarthritic and cytostatic activities. (I) can be used for delivering a bioactive macromolecule to a mucosal surface. It is used for the oral delivery of a drug to an animal encompassing a human as well as other mammals, reptiles, fish, amphibians and birds. It is used to deliver drugs including peptides, proteins, monoclonal antibodies their fragments, nucleic acids (DNA and RNA), oligonucleotides, antisense oligonucleotides, and small molecules. It can be used to examine the function of various proteins and genes in an animal, including those that are essential to animal development. It can be used for the treatment of animals that are known or suspected to suffer from any disease treatable with the inventive composition, e.g. ulcerative colitis, rheumatoid arthritis, Crohn's disease, inflammatory bowel disease, or undue cellular proliferation (cancers and tumours). The present sequence represents an exemplary oligonucleotide from the present invention, which can be used to inhibit TNF-alpha

XX SQ Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 845 GTGGCTCAGATCCCTATCT 864

Db 1 GTGGCCAGACACCTATCT 20

RESULT 1340

ABX09092/c

ID ABX09092 standard; DNA; 20 BP.

XX AC ABX09092;

XX DT 22-JAN-2003 (first entry)

XX DE Human dual specific phosphatase 5 phosphorothioate oligonucleotide #31.

XX KW Human; dual specific phosphatase 5; ss; developmental disorder; hyperproliferative disorder; inflammatory disorder aberrant apoptosis; antiinflammatory; cytostatic; antipapoptotic; antiproliferative; phosphorothioate oligonucleotide.

XX OS Homo sapiens.

XX OS Synthetic.

XX PN W0200297108-A2.

```
PD 05-DEC-2002.
XX
XX
PF 15-MAY-2002; 2002WO-US015305.
XX
PR 25-MAY-2001; 2001US-00865993.
XX
XX (ISIS-) ISIS PHARM INC.
XX
XX Monia BP, Watt AT;
XX
XX WPI; 2003-041418/03.
XX
XX
PT Antisense modulation of dual specific phosphatase 5 expression used in
PT treating disorders e.g. inflammatory diseases.
XX
XX Claim 3; Page 84; 110pp; English.
XX
CC The invention relates to a compound 8-50 nucleobases in length targeted
CC to a nucleic acid molecule encoding dual specific phosphatase 5, where
CC the compound specifically hybridises with and inhibits the expression of
CC dual specific phosphatase 5. The compound is used for treating an animal
CC having a disease or condition associated with dual specific phosphatase 5
CC such as a hyperproliferative disorder, a developmental disorder, an
CC inflammatory disorder or a disease which arises from aberrant apoptosis.
CC Sequences ABX09062-ABX09139 represent human dual specific phosphatase 5
CC phosphorothioate oligonucleotides of the invention
XX
XX Sequence 20 BP; 2 A; 7 C; 3 G; 8 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
QY 322 TACAGCAGCAGATGCAGAG 341
Db 20 TACATCAAGCAGAGGAGGAG 1
|||||
20 TACATCAAGCAGAGGAGGAG 1

RESULT 1341
ABX09079/c
ID ABX09079 standard; DNA; 20 BP.
XX
XX AC ABX09079;
XX
XX DT 22-JAN-2003 (first entry)
XX
XX DE Human dual specific phosphatase 5 phosphorothioate oligonucleotide #18.
XX
XX KW Human; dual specific phosphatase 5; ss; developmental disorder;
XX hyperproliferative disorder; inflammatory disorder aberrant apoptosis;
XX antiinflammatory; cytostatic; antiapoptotic; antiproliferative;
XX phosphorothioate oligonucleotide.
XX
XX OS Homo sapiens.
XX Synthetic.
XX
XX PN WO200297108-A2.
XX
XX PD 05-DEC-2002.
XX
XX PF 15-MAY-2002; 2002WO-US015305.
XX
XX PR 25-MAY-2001; 2001US-00865993.
XX
XX XX (ISIS-) ISIS PHARM INC.
XX
XX PA Monia BP, Watt AT;
XX
XX PI WPI; 2003-041418/03.
XX
XX DR
XX
XX PT Antisense modulation of dual specific phosphatase 5 expression used in
XX treating disorders e.g. inflammatory diseases.
XX

PS Claim 3; Page 84; 110pp; English.
XX
XX The invention relates to a compound 8-50 nucleobases in length targeted
XX to a nucleic acid molecule encoding dual specific phosphatase 5, where
XX the compound specifically hybridises with and inhibits the expression of
XX dual specific phosphatase 5. The compound is used for treating an animal
XX having a disease or condition associated with dual specific phosphatase 5
XX such as a hyperproliferative disorder, a developmental disorder, an
XX inflammatory disorder or a disease which arises from aberrant apoptosis.
XX Sequences ABX09062-ABX09139 represent human dual specific phosphatase 5
XX phosphorothioate oligonucleotides of the invention
XX
XX Sequence 20 BP; 3 A; 5 C; 6 G; 6 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
XX
QY 482 ACCATGCAAGAGAGTCCGAG 501
Db 20 ACCATGCAATCCCAAGTCCGAG 1
|||||
20 ACCATGCAATCCCAAGTCCGAG 1

RESULT 1342
AAL61490/c
ID AAL61490 standard; DNA; 20 BP.
XX
XX AC AAL61490;
XX
XX DT 22-SEP-2003 (first entry)
XX
XX DE Human ATF3 antisense oligonucleotide, ISIS 185473.
XX
XX KW Human; activating transcription factor 3; ATF3; ischaemia; diabetes;
XX liver regeneration factor-1; LRF-1; antisense therapy; CRG-5; LRG-21;
XX TI-241; phosphorothioate backbone; antisense; ss.
XX
XX OS Homo sapiens.
XX Synthetic.
XX
XX PH Key Location/Qualifiers
FT modified_base 1..20
FT /tag= a
FT /mod_base= OTHER
FT /note= "Phosphorothioate backbone; All cytidines are 5-
FT methylcytidines"
FT modified_base 1..5
FT /tag= b
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
FT modified_base 16..20
FT /tag= c
FT /mod_base= OTHER
FT /note= "2'methoxyethyl nucleotides"
XX
XX WO2003040161-A2.
XX
XX PN 15-MAY-2003.
XX
XX PD 04-NOV-2002; 2002WO-US035331.
XX
XX PF 08-NOV-2001; 2001US-00010002.
XX
XX PR (ISIS-) ISIS PHARM INC.
XX
XX PA Baker BF, Dobie K;
XX
XX PI WPI; 2003-441517/41.
XX
XX DR
XX
XX PT New antisense oligonucleotide compounds, useful for diagnosing,
XX preventing and/or treating conditions with aberrant activity of the
XX activating transcription factor 3, such as ischemia and diabetes.
XX
```

PS Claim 3; Page 77; 126pp; English.

XX The invention relates to antisense compounds, compositions and methods

CC for modulating the expression for activating transcription factor 3

CC (ATF3). ATF3 is also known as liver regeneration factor-1 (LRF-1), CRG-5,

CC LRG-21, and TI-241. The invention is useful for the diagnosis, prevention

CC and/or treatment of diseases or conditions associated with aberrant

CC expression or activity of ATF3, such as ischaemia and diabetes. The

CC antisense compound is useful in antisense therapy. The present sequence

CC is an antisense oligonucleotide targetted to human ATF3 DNA. This

CC sequence is used to illustrate the method of the invention

XX Sequence 20 BP; 4 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

SQ Query Match 0.7%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 1014 TGTGGCCTGTGATACGGAGA 1033

Db 20 TGTGTCCAGGAGTCGGAGA 1

RESULT 1343

ABQ77095/C

ID ABQ77095 standard; DNA; 20 BP.

XX AC ABQ77095;

XX 04-APR-2003 (first entry)

DT Human CS 197 sequencing primer SQ ID 11.

XX CS 197; human; cytostatic; gastrointestinal tract; cancer;

KW drug screening; gene therapy; vaccine; sequencing; primer; ss.

XX Homo sapiens.

OS US2002137904-A1.

XX 26-SEP-2002.

PD 27-MAR-1998; 98US-00049695.

PF 27-MAR-1998; 98US-00049695.

PR (BILL/) BILLINGEL P A.

XX (COHE/) COHEN M.

PA (COLP/) COLPITTS T L.

PA (FRIE/) FRIEDMAN P N.

PA (HAYD/) HAYDEN M.

PA (KLAS/) KLASS M R.

PA (ROBE/) ROBERTS-RAPP L.

PA (RUSS/) RUSSELL J C.

PA (STRO/) STROUPE S D.

XX Billengel PA, Cohen M, Colpitts TL, Friedman PN, Hayden M;

PI Klass MR, Roberts-Rapp L, Russell JC, Stroupe SD;

XX WPI; 2003-102398/09.

DR New purified CS 197 polynucleotide or its fragment, useful for

PT diagnosing, preventing, treating or determining the predisposition of an

PT individual to gastrointestinal tract (GI) diseases, e.g. GI tract cancer.

XX Example 2; Page 38; 48pp; English.

PS This invention describes a novel polynucleotide or fragment derived from

CC a CS197 gene which has cytostatic activity. The polynucleotide is useful

CC in detecting, diagnosing, staging, monitoring, prognosticating,

CC preventing, treating, or determining the predisposition of an individual

CC to diseases and conditions of the gastrointestinal tract, such as

CC gastrointestinal tract cancer. The polynucleotide may also be used for

CC producing a polypeptide by recombinant techniques. The products of the

CC invention may be used for screening for drugs, compounds, or any other

CC agents that can be used to treat diseases associated with CS 197, gene

CC therapy or in a vaccine. This sequence represents a sequencing primer

CC associated with the human CS 197 clones described in the disclosure of

CC the invention

XX Sequence 20 BP; 9 A; 6 C; 4 G; 1 T; 0 U; 0 Other;

SQ Query Match 0.7%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 526 GATATCGTCTGGCCATCCT 545

Db 20 GATGTGCTCTGGTCTTCCT 1

RESULT 1344

AAL60476

ID AAL60476 standard; DNA; 20 BP.

XX AC AAL60476;

XX 27-AUG-2003 (first entry)

DT Mouse anti-human DR5 antibody (TRA-8) cDNA cloning PCR primer, LCSR.

XX Tumour necrosis factor; TNF-related apoptosis-inducing ligand; allergy;

KW inflammatory disease; TRAIL receptor; systemic lupus erythematosus; DR4;

KW Hashimoto's disease; rheumatoid arthritis; inflammatory disease; cancer;

KW multiple sclerosis; graft-versus-host disease; arteriosclerosis; asthma;

KW Goodpasture's syndrome; autoimmune disease; glomerular nephritis; DR5;

KW Crohn's disease; diabetes mellitus; TRA-8 antibody; mouse; PCR; primer;

XX ss.

OS Mus sp.

XX WO2003037913-A2.

PN 08-MAY-2003.

PD 01-NOV-2002; 2002WO-US035333.

PF 01-NOV-2001; 2001US-0346402P.

PR (UABR-) UAB RES FOUND.

XX Zhou T, Kimberly RP, Koopman WJ, Lobuglio AF, Buchsbaum DJ;

PI WPI; 2003-441350/41.

DR New purified antibody that specifically binds a TNF-related apoptosis-

PT inducing ligand receptor DR4 or DR5, useful for treating cancer,

PT inflammatory disease or autoimmune disease in a subject, e.g. asthma or

PT rheumatoid arthritis.

XX Example 16; Page 77; 251pp; English.

PS The invention relates to an antibody that specifically binds a tumour

CC necrosis factor (TNF)-related apoptosis-inducing ligand (TRAIL) receptor

CC DR4 or DR5. Antibodies of the invention are useful for selectively

CC inducing apoptosis in target cells expressing DR4, for inhibiting

CC proliferation of target cells expressing DR4 or for treating cancer,

CC inflammatory disease or autoimmune disease in a subject e.g. systemic

CC lupus erythematosus, Hashimoto's disease, rheumatoid arthritis, graft-

CC versus-host disease, Goodpasture's syndrome, Crohn's disease, multiple

CC sclerosis, diabetes mellitus, allergy, asthma, arteriosclerosis or

CC glomerular nephritis. The present sequence is a PCR primer used to clone

CC mouse anti-human DR5 antibody (TRA-8) cDNA

XX Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;

```
Query Match      0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 634 GACCGGGTCATGACTGTGTC 653
DB 1 GACTGGGTCATCAATGTC 20

RESULT 1345
AAL60474/c
ID AAL60474 standard; DNA; 20 BP.
XX AC AAL60474;
XX DT 27-AUG-2003 (first entry)
XX DE Mouse anti-human DR5 antibody (TRA-8) cDNA cloning PCR primer, L5CS.
XX KW Tumour necrosis factor; TNF-related apoptosis-inducing ligand; allergy;
XX KW inflammatory disease; TRAIL receptor; systemic lupus erythematosus; DR4;
XX KW Hashimoto's disease; rheumatoid arthritis; inflammatory disease; cancer;
XX KW multiple sclerosis; graft-versus-host disease; arteriosclerosis; asthma;
XX KW Goodpasture's syndrome; autoimmune disease; glomerular nephritis; DR5;
XX KW Crohn's disease; diabetes mellitus; TRA-8 antibody; mouse; PCR; primer;
XX KW ss.
XX OS Mus sp.
XX PN WO2003037913-A2.
XX PD 08-MAY-2003.
XX PF 01-NOV-2002; 2002WO-US035333.
XX PR 01-NOV-2001; 2001US-0346402P.
XX PS (UABR-) UAB RES FOUND.
XX PI Zhou T, Kimberly RP, Koopman WJ, Lobuglio AF, Buchsbaum DJ;
XX PFPI; 2003-441350/41.
XX PT New purified antibody that specifically binds a TNF-related apoptosis-
XX PT inducing ligand receptor DR4 or DR5, useful for treating cancer,
XX PT inflammatory disease or autoimmune disease in a subject, e.g. asthma or
XX PT rheumatoid arthritis.
XX PS Example 16; Page 77; 251pp; English.
XX CC The invention relates to an antibody that specifically binds a tumour
XX CC necrosis factor (TNF)-related apoptosis-inducing ligand (TRAIL) receptor
XX CC DR4 or DR5. Antibodies of the invention are useful for selectively
XX CC inducing apoptosis in target cells expressing DR4, for inhibiting
XX CC proliferation of target cells expressing DR4 or for treating cancer.
XX CC inflammatory disease or autoimmune disease in a subject e.g. systemic
XX CC lupus erythematosus, Hashimoto's disease, rheumatoid arthritis, graft-
XX CC versus-host disease, Goodpasture's syndrome, Crohn's disease, multiple
XX CC sclerosis, diabetes mellitus, allergy, asthma, arteriosclerosis or
XX CC glomerular nephritis. The present sequence is a PCR primer used to clone
XX CC mouse anti-human DR5 antibody (TRA-8) cDNA
XX SQ Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;

Query Match      0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 634 GACCGGGTCATGACTGTGTC 653
DB 20 GACTGGGTCATCAATGTC 1
```

```
RESULT 1346
ABZ23818/c
ID ABZ23818 standard; DNA; 20 BP.
XX AC ABZ23818;
XX DT 18-MAR-2003 (first entry)
XX DE EGFR mRNA inhibiting antisense oligonucleotide AS8.
XX KW Epidermal growth factor receptor; EGFR; cytostatic; cancer; EGF;
XX KW antisense; ss.
XX OS Synthetic.
XX OS Homo sapiens.
XX PN WO200290514-A2.
XX PD 14-NOV-2002.
XX PF 07-MAY-2002; 2002WO-US014557.
XX PR 07-MAY-2001; 2001US-0289055P.
XX PR 07-MAY-2001; 2001US-0289149P.
XX PA (HYBR-) HYBRIDON INC.
XX PI Agrawal S, Kandimalia ER;
XX PFPI; 2003-120540/11.
XX PT New synthetic oligonucleotide complementary to nucleic acids encoding
XX PT epidermal growth factor receptor (EGFR), useful for inhibiting the EGFR
XX PT gene or mRNA expression, and reducing cancer cell proliferation.
XX PS Claim 10; Page 13; 36pp; English.
XX CC The invention relates to synthetic antisense oligonucleotides
XX CC complementary to a region of nucleic acid encoding epidermal growth
XX CC factor receptor (EGFR) with location 245-1117, 2407-3201, 3786-4102 or
XX CC 4574-45633. The methods and compositions of the invention are useful for
XX CC enhancing inhibition of EGFR gene or mRNA expression, and reducing cancer
XX CC cell proliferation, in particular cancer cells of the colon, ovarian or
XX CC breast. Sequences ABZ23811-832 represent specific examples of such
XX CC antisense oligonucleotides that inhibit the EGFR mRNA expression
XX SQ Sequence 20 BP; 1 A; 8 C; 4 G; 7 T; 0 U; 0 Other;

Query Match      0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1461 GGAGGAGAGCCAGAGCCA 1480
DB 20 GGAGGAGAGGCACACTCCA 1

RESULT 1347
ABX04368
ID ABX04368 standard; DNA; 20 BP.
XX AC ABX04368;
XX DT 13-JAN-2003 (first entry)
XX DE Human Interleukin 5 antisense oligonucleotide ISIS 16099.
XX KW Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
XX KW immunosuppressant; eosinophilic syndrome; asthma.
XX OS Homo sapiens.
XX PN US2002128216-A1.
```

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XX PD 12-SEP-2002.
XX PF 07-MAR-2001; 2001US-00800629.
XX PF 26-MAR-1999; 99US-00280799.
XX PR 17-MAR-2000; 2000WO-US007318.
XX PA (DEAN/) DEAN N M.
XX PA (KARR/) KARRAS J G.
XX PA (MCKA/) MCKAY R.
XX PA (MANO/) MANOHARAN M.
XX PI Dean NM, Karras JG, Mckay R, Manoharan M;
XX DR WPI; 2003-039602/03.
XX PT Novel antisense compound for treating disease/condition e.g. eosinophilic
XX PT syndrome or asthma associated with interleukin-5 or IL-5 receptor
XX PT expression or IL-5 signal transduction, modulates IL-5 signal
XX PT transduction.
XX PS Example 20; Page 19; 77pp; English.
XX CC The invention relates to an antisense compound of 8-30 nucleobases in
XX CC length, which modulates interleukin (IL)-5 signal transduction. Also
XX CC include are a pharmaceutical composition comprising the antisense
XX CC oligonucleotide and a pharmaceutically acceptable carrier or diluent, and
XX CC a diagnostic kit for detecting the expression level of the membrane form
XX CC versus soluble form of IL-5 receptor a. The antisense compound is useful
XX CC for modulating IL-5 signal transduction, modulating expression of
XX CC mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a,
XX CC in cells or tissues, for altering the ratio of the isoforms of mammalian
XX CC IL-5 receptor a in mammalian cells or tissues, treating a mammalian
XX CC having a disease or condition associated with IL-5 signal transduction,
XX CC IL-5 expression or IL-5 receptor a expression, where the disease or
XX CC condition include eosinophilic syndrome or asthma. An antisense compound
XX CC which alters splicing of an RNA encoding IL-5 receptor a is also useful
XX CC for treating a mammal having a disease or condition. The present sequence
XX CC is an antisense oligonucleotide targeting human IL5
XX SQ Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1321 TTCTCCGATTCTGAAGAGGA 1340
Dd 1 TCCTCAGAGCTGGAGAGGA 20
RESULT 1348
ABX04345
ID ABX04345 standard; DNA; 20 BP.
AC ABX04345;
XX 13-JAN-2003 (first entry)
XX Human Interleukin 5 antisense oligonucleotide ISIS 16076.
XX Human; ss; antisense; interleukin 5; IL-5; IL-5 receptor; antiasthmatic;
KW immunosuppressant; eosinophilic syndrome; asthma.
XX Homo sapiens.
XX US2002128216-A1.
XX 12-SEP-2002.
XX 07-MAR-2001; 2001US-00800629.
```

```
PR 26-MAR-1999; 99US-00280799.
PR 17-MAR-2000; 2000WO-US007318.
XX PA (DEAN/) DEAN N M.
XX PA (KARR/) KARRAS J G.
XX PA (MCKA/) MCKAY R.
XX PA (MANO/) MANOHARAN M.
XX PI Dean NM, Karras JG, Mckay R, Manoharan M;
XX DR WPI; 2003-039602/03.
XX PT Novel antisense compound for treating disease/condition e.g. eosinophilic
XX PT syndrome or asthma associated with interleukin-5 or IL-5 receptor
XX PT expression or IL-5 signal transduction, modulates IL-5 signal
XX PT transduction.
XX PS Example 20; Page 19; 77pp; English.
XX CC The invention relates to an antisense compound of 8-30 nucleobases in
XX CC length, which modulates interleukin (IL)-5 signal transduction. Also
XX CC include are a pharmaceutical composition comprising the antisense
XX CC oligonucleotide and a pharmaceutically acceptable carrier or diluent, and
XX CC a diagnostic kit for detecting the expression level of the membrane form
XX CC versus soluble form of IL-5 receptor a. The antisense compound is useful
XX CC for modulating IL-5 signal transduction, modulating expression of
XX CC mammalian IL-5 or modulating the expression of mammalian IL-5 receptor a,
XX CC in cells or tissues, for altering the ratio of the isoforms of mammalian
XX CC IL-5 receptor a in mammalian cells or tissues, treating a mammalian
XX CC having a disease or condition associated with IL-5 signal transduction,
XX CC IL-5 expression or IL-5 receptor a expression, where the disease or
XX CC condition include eosinophilic syndrome or asthma. An antisense compound
XX CC which alters splicing of an RNA encoding IL-5 receptor a is also useful
XX CC for treating a mammal having a disease or condition. The present sequence
XX CC is an antisense oligonucleotide targeting human IL5
XX SQ Sequence 20 BP; 5 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1321 TTCTCCGATTCTGAAGAGGA 1340
Dd 1 TCCTCAGAGCTGGAGAGGA 20
RESULT 1349
ACC45870/c
ID ACC45870 standard; DNA; 20 BP.
XX ACC45870;
XX 02-JUN-2003 (first entry)
XX Human HBM STS marker forward primer #225.
XX Human; high bone mass; HBM; LRP5; LRP6; transgenic; bone mass modulation;
KW gene therapy; bone density modulation; bone strength; trabecular number;
KW bone size; bone tissue connectivity; bone disease; osteoporosis; PCR;
KW osteomalacia; rickets; Paget's disease; neoplasm of the bone; primer; ss.
XX Homo sapiens.
XX WO200292764-A2.
XX 21-NOV-2002.
XX 13-MAY-2002; 2002WO-US014876.
XX 11-MAY-2001; 2001US-0290071P.
XX 17-MAY-2001; 2001US-0291311P.
XX 01-FEB-2002; 2002US-0353058P.
```


CC regions of the 216 gene that contain single nucleotide polymorphisms
 CC (SNP's) which may be used as markers for disease susceptibility or
 CC severity. The nucleotides of the invention may have antiasthmatic,
 CC antiinflammatory or anorectic activities and may be used in gene therapy.
 CC The nucleic acids, antibodies or its fragments are useful for diagnosing,
 CC preventing or treating a disorder, such as respiratory diseases (e.g.
 CC asthma, bronchial hyper-responsiveness, chronic obstructive pulmonary
 CC disease or adult respiratory distress syndrome), obesity, or inflammatory
 CC bowel syndrome. The nucleic acids are also useful for identifying
 CC increased susceptibility of a subject to the disorders mentioned. The
 CC nucleic acids can also be used as primers and templates for the
 CC recombinant production of disorder-associated peptides or polypeptides,
 CC for chromosome and gene mapping, or for tissue distribution studies. The
 CC present sequence represents a gene 216 specific PCR primer used in the
 CC scope of the invention
 CC
 XX
 SQ Sequence 20 BP; 3 A; 7 C; 5 G; 5 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 955 CTGGAGCGCGTGTACAC 974
 Db 20 CTGGAGCGCGTAGCAACAC 1
 RESULT 1352
 ABX75091/c
 ID ABX75091 standard; DNA; 20 BP.
 XX
 AC ABX75091;
 XX
 DT 25-MAR-2003 (first entry)
 XX
 DE Human gene 216 polymorphism detection PCR primer #148.
 XX
 KW Human; mouse; ss; primer; gene 216; antiasthmatic; antiinflammatory;
 KW anorectic; chromosome 20p13-p12; single nucleotide polymorphism; SNP;
 KW gene therapy; respiratory disease; asthma; obesity; PCR;
 KW bronchial hyper-responsiveness; chronic obstructive pulmonary disease;
 KW adult respiratory distress syndrome; inflammatory bowel syndrome.
 XX
 OS Homo sapiens.
 XX
 PN WO200283077-A2.
 XX
 PD 24-OCT-2002.
 XX
 PF 15-APR-2002; 2002WO-US012063.
 XX
 PR 13-APR-2001; 2001US-00834597.
 PR 13-APR-2001; 2001WO-US012245.
 XX
 PA (SCHE) SCHERING CORP.
 PA (GENO-) GENOME THERAPEUTICS CORP.
 XX
 PI Keith T, Little RD, Van Berdewegh P, Dupuis J, Del Mastro RG;
 PI Simon J, Allen K, Pandit S;
 XX
 DR WPI; 2003-092960/08.
 XX
 XX New isolated gene 216 nucleic acids, useful for diagnosing, preventing or
 PT treating a disorder, such as asthma, bronchial hyper-responsiveness,
 PT chronic obstructive pulmonary disease, obesity or inflammatory bowel
 PT syndrome.
 XX
 PS Example 10; Page 157; 650pp; English.
 XX
 CC This invention relates to a novel isolated nucleic acid, gene 216,
 CC identified from human chromosome 20p13-p12. The invention also discloses
 CC regions of the 216 gene that contain single nucleotide polymorphisms
 CC (SNP's) which may be used as markers for disease susceptibility or

CC severity. The nucleotides of the invention may have antiasthmatic,
 CC antiinflammatory or anorectic activities and may be used in gene therapy.
 CC The nucleic acids, antibodies or its fragments are useful for diagnosing,
 CC preventing or treating a disorder, such as respiratory diseases (e.g.
 CC asthma, bronchial hyper-responsiveness, chronic obstructive pulmonary
 CC disease or adult respiratory distress syndrome), obesity, or inflammatory
 CC bowel syndrome. The nucleic acids are also useful for identifying
 CC increased susceptibility of a subject to the disorders mentioned. The
 CC nucleic acids can also be used as primers and templates for the
 CC recombinant production of disorder-associated peptides or polypeptides,
 CC for chromosome and gene mapping, or for tissue distribution studies. The
 CC present sequence represents a gene 216 specific PCR primer used in the
 CC scope of the invention
 CC
 XX
 SQ Sequence 20 BP; 3 A; 7 C; 5 G; 5 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 955 CTGGAGCGCGTGTACAC 974
 Db 20 CTGGAGCGCGTAGCAACAC 1
 RESULT 1353
 ABT32629
 ID ABT32629 standard; DNA; 20 BP.
 XX
 AC ABT32629;
 XX
 DT 15-MAY-2003 (first entry)
 XX
 DE Microbial host construction related oligo SEQ ID No 13.
 XX
 KW Eukaryotic microbial host; foreign protein; Schizosaccharomyces pombe;
 KW PCR; primer; ss.
 XX
 OS Unidentified.
 XX
 PN WO2002101038-A1.
 XX
 PD 19-DEC-2002.
 XX
 PF 29-MAY-2002; 2002WO-JP005223.
 XX
 PR 29-MAY-2001; 2001JP-00160128.
 XX
 PA (ASAG) ASahi GLASS CO LTD.
 XX
 PI Thoda H, Hama Y, Kumagai H;
 XX
 DR WPI; 2003-156961/15.
 XX
 PT Construction of a eukaryotic microbial host with elevated foreign protein
 PT production, useful for producing foreign proteins, comprises deletion or
 PT inactivation of the genome part unnecessary or harmful to protein
 PT production.
 XX
 PS Example 5; Page 12; 34pp; Japanese.
 XX
 CC The invention relates to a novel method for constructing a eukaryotic
 CC microbial host for producing a foreign protein with elevated production
 CC efficiency, where the protein is encoded by a gene which has been
 CC transferred by a gene modification method. The gene modification method
 CC comprises deletion, partial deletion or inactivation of the parts of the
 CC host genome that are unnecessary or harmful to the production of the
 CC foreign protein. A favourable microbial host employed in the method is
 CC Schizosaccharomyces pombe. The constructed hosts are useful for producing
 CC foreign proteins. This polynucleotide sequence represents an
 CC oligonucleotide used in the novel microbial construction method of the
 CC invention
 CC

SQ	Sequence 20 BP; 6 A; 6 C; 4 G; 4 T; 0 U; 0 Other;	
	Query Match 0.7%; Score 13.6; DB 1; Length 20;	
	Best Local Similarity 80.0%; Pred. No. 1.1e+03;	
	Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;	
QY	439 AAGCAGCAGCAGCAGCATCGC 458	
DB	1 AATCTGCAATCGGACATCGC 20	
RESULT 1354		
ABT43376		
ID	ABT43376 standard; DNA; 20 BP.	
XX		
AC	ABT43376;	
XX		
DT	22-SEP-2003 (first entry)	
XX		
DE	Neuroblastoma-related DNA sequence #291.	
KW	Neuroblastoma; prognosis; ds; oligonucleotide.	
XX	Unidentified.	
OS		
PN	WO2002103017-Al.	
XX		
PD	27-DEC-2002.	
XX		
PF	30-MAY-2002; 2002WO-JP005295.	
XX		
PR	31-MAY-2001; 2001JP-00163666.	
PR	24-AUG-2001; 2001JP-00255260.	
XX		
PA	(CHIB-) CHIBA PREFECTURE.	
PA	(HISM) HISAMITSU PHARM CO LTD.	
XX		
PI	Nakagawara A;	
XX		
DR	WPI; 2003-167523/16.	
XX		
PT	Nucleic acids isolated from neuroblastoma showing enhanced expression in human neuroblastoma with good prognosis, useful in clarifying good/poor prognosis of neuroblastoma and providing genetic data.	
XX	Unidentified.	
OS		
PN	WO2002103017-Al.	
XX		
PD	27-DEC-2002.	
XX		
PF	30-MAY-2002; 2002WO-JP005295.	
XX		
PR	31-MAY-2001; 2001JP-00163666.	
PR	24-AUG-2001; 2001JP-00255260.	
XX		
PA	(CHIB-) CHIBA PREFECTURE.	
PA	(HISM) HISAMITSU PHARM CO LTD.	
XX		
PI	Nakagawara A;	
XX		
DR	WPI; 2003-167523/16.	
XX		
PT	Nucleic acids isolated from neuroblastoma showing enhanced expression in human neuroblastoma with good prognosis, useful in clarifying good/poor prognosis of neuroblastoma and providing genetic data.	
XX	Example 5; Page 25(1); 444pp; Japanese.	
CC	The invention comprises DNA sequences that show enhanced expression in human neuroblastoma with good prognosis. The DNA sequences of the invention are useful in clarifying good/poor prognosis of neuroblastoma. The present DNA sequence was used in the exemplification of the invention	
XX	Sequence 20 BP; 8 A; 8 C; 3 G; 2 T; 0 U; 0 Other;	
QY	1256 AAGCAGCAGCCTGACAGCGC 1275	
DB	1 ACGACGACACTGACACCCAC 20	
RESULT 1356		
ABT43354/C		
ID	ABT43354 standard; DNA; 20 BP.	
XX		
AC	ABT43354;	
XX		
DT	22-SEP-2003 (first entry)	
XX		
DE	Neuroblastoma-related DNA sequence #269.	
XX		
KW	Neuroblastoma; prognosis; ds; oligonucleotide.	
XX	Unidentified.	
OS		
PN	WO2002103017-Al.	
XX		
PD	27-DEC-2002.	
XX		
PF	30-MAY-2002; 2002WO-JP005295.	
XX		
PR	31-MAY-2001; 2001JP-00163666.	
PR	24-AUG-2001; 2001JP-00255260.	
XX		
PA	(CHIB-) CHIBA PREFECTURE.	
PA	(HISM) HISAMITSU PHARM CO LTD.	
XX		
PI	Nakagawara A;	
XX		
DR	WPI; 2003-167523/16.	
XX		
PT	Nucleic acids isolated from neuroblastoma showing enhanced expression in	

SQ	Sequence 20 BP; 6 A; 6 C; 4 G; 4 T; 0 U; 0 Other;	
	Query Match 0.7%; Score 13.6; DB 1; Length 20;	
	Best Local Similarity 80.0%; Pred. No. 1.1e+03;	
	Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;	
QY	1449 GGAGAAAACCAAGGAGGAGA 1468	
DB	1 GGAGCAATCCAGGAGATGA 20	
RESULT 1355		
ABT43140		
ID	ABT43140 standard; DNA; 20 BP.	
XX		
AC	ABT43140;	
XX		
DT	22-SEP-2003 (first entry)	
XX		
DE	Neuroblastoma-related DNA sequence #55.	
XX		
PT	Nucleic acids isolated from neuroblastoma showing enhanced expression in	

CC treatment related brain/spinal cord tissue injury, infection and
 CC inflammation related brain/spinal cord injury, environmental toxin
 CC related brain/spinal cord injury, multiple sclerosis, autism, attention
 CC deficit disorders, narcolepsy or sleep disorders. The PDGF and/or VEGF,
 CC is useful in the manufacture of a medicament for alleviating or treating
 CC these diseases or disorders, accelerating growth of neural stem cells or
 CC neural progenitor cells, or inducing proliferation or differentiation of
 CC these cells. This primer gives an estimated band size of 434 bp
 XX
 SQ Sequence 20 BP; 6 A; 5 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 254 TGACCAAGTACACAGCGAT 273
 Db 1 TGAGCAAGGCCACAGGGAT 20

RESULT 1359

ID ABZ82165/c

XX ABZ82165 standard; DNA; 20 BP.

AC ABZ82165;

XX 17-JUN-2003 (first entry)

DT PCR primer 15 ICK1 R.

DE ICK1; NCED3; NCED; AtNCED3; 9-cis-epoxycarotenoid dioxygenase;
 KW salt tolerance; stress resistance; plant; transgenic plant; PCR; primer;
 KW ss.

XX Arabidopsis thaliana.

OS Arabidopsis thaliana.

XX WO2003020015-A2.

PN 13-MAR-2003.

XX 30-AUG-2002; 2002WO-US027701.

PF 30-AUG-2001; 2001US-0316894P.

XX (PURD) PURDUE RES FOUND.

PA Ruggiero B, Bressan RA, Hasegawa PM;

PI WPI; 2003-300807/29.

XX Producing transgenic plants resistant to environmental stress such as
 PT salt, drought, cold, osmotic or pathogen, by using 9-cis-epoxycarotenoid
 PT dioxygenase nucleic acid.

XX Example; Page 77; 125pp; English.

PS The present sequence is that of primer 15 ICK1 R. The primer was used to
 CC synthesis a Northern blot hybridisation probe in an example from the
 CC invention in which 9-cis-epoxycarotenoid dioxygenase-3 (NCED3)
 CC transcripts were analysed in Arabidopsis plants. Overexpression of the
 CC NCED3 gene was shown to increase plant salt tolerance. The invention
 CC provides plants that exhibit increased salt tolerance or increased stress
 CC resistance. These comprise: a mutant plant having a mutated NCED gene;
 CC plant having a null mutation in an endogenous NCED gene; a transgenic
 CC plant comprising an isolated NCED nucleic acid linked to a plant promoter
 CC ; a transgenic plant comprising an isolated nucleic acid that encodes an
 CC inhibitory NCED RNA that inhibits the function of endogenous NCED RNA;
 CC and a transgenic plant where the inhibitory RNA is complementary to a
 CC NCED nucleic acid or hybridises to endogenous RNA encoding NCED. The
 CC plants can develop in the presence of a concentration of salt that would
 CC normally inhibit the development of the plant. The plants may be dicots
 CC (e.g. soybean) or monocots (e.g. corn, rice, rye, oat or wheat) and can
 CC be used to produce food or feed (all claimed)

XX SQ Sequence 20 BP; 2 A; 7 C; 3 G; 8 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1458 CRAGGAGGAGGCCAGAG 1477
 Db 20 CGAAGAGGAGGCCATTAG 1

RESULT 1360

ACC86771/c

ID ACC86771 standard; DNA; 20 BP.

XX ACC86771;

XX 04-AUG-2003 (first entry)

DT Human VEGFR-1 chimeric phosphorothioate oligonucleotide SEQ ID NO:66.

DE Vascular endothelial growth factor receptor 1; VEGF receptor; VEGFR;
 KW inhibitor; cytostatic; antirheumatic; antiarthritic; antiangiogenic;
 KW antiinflammatory; antisense gene therapy; hyperproliferative disorder;
 KW cancer; rheumatoid arthritis; angiogenesis; infection; inflammation;
 KW tumour formation; phosphorothioate; 2'-O-methoxyethyl; 2'-MOE; ss.

XX Homo sapiens.

OS Synthetic.

XX Key Location/Qualifiers

FT modified_base 1..20

FT /*tag= a

FT /mod_base= OTHER

FT /notes "This oligonucleotide has a phosphorothioate

FT backbone and 2'-O-methoxyethyl (2'-MOE) wings at the 5'

FT and 3' ends, which are 5 nucleotides in length. Also all

FT cytidine residues are 5-methylcytidines"

XX WO2003022227-A2.

PN 20-MAR-2003.

XX 12-SEP-2002; 2002WO-US029148.

PF 13-SEP-2001; 2001US-00953318.

XX (ISIS-) ISIS PHARM INC.

PA Bennett CF, Watt AT;

PI WPI; 2003-301004/29.

XX New antisense oligonucleotide targeted to a nucleic acid encoding

PT vascular endothelial growth factor receptor-1, useful for diagnosing or

PT treating cancer, rheumatoid arthritis, or diseases or conditions

PT involving angiogenesis.

XX Example 15; Page 83; 150pp; English.

PS The present invention describes a compound (C) 8-50 nucleobases in length

CC targeted to a nucleic acid molecule encoding vascular endothelial growth

CC factor receptor-1 (VEGFR-1), where the compound inhibits the expression

CC of VEGFR-1 and specifically hybridises with the nucleic acid encoding

CC VEGFR-1 or with an 8-nucleobase portion of an active site on the nucleic

CC acid molecule encoding VEGFR-1. Also described: (1) a composition

CC comprising (C) and a carrier or diluent; (2) inhibiting the expression of

CC VEGFR-1 in cells or tissues by contacting the cells or tissues with (C)

CC so that the expression of VEGFR-1 is inhibited; and (3) treating an

CC animal having a disease or condition associated with VEGFR-1 by

CC administering (C) to the animal so that the expression of VEGFR-1 is

CC inhibited. (C) has antiangiogenic, antirheumatic, antiarthritic,

CC cytostatic and antiinflammatory activities, and can be used in antisense
 CC gene therapy. The antisense compounds are useful for modulating the
 CC expression of VEGFR-1 and for treating diseases or conditions associated
 CC with the expression of VEGFR-1, such as hyperproliferative disorders
 CC (e.g. cancer), rheumatoid arthritis, or diseases or conditions involving
 CC angiogenesis. The antisense compounds are also useful for diagnostics,
 CC therapeutics, prophylaxis, e.g. to prevent or delay infection,
 CC inflammation or tumour formation, as research reagents and kits, and in
 CC distinguishing between functions of various members of a biological
 CC pathway. The present sequence represents a human VEGFR-2 chimeric
 CC phosphorothioate antisense oligonucleotide, which is used in an example
 CC from the present invention
 XX Sequence 20 BP; 1 A; 7 C; 6 G; 6 T; 0 U; 0 Other;
 SQ

Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 479 TGCACCTGCAAGAGTCC 498
 ||||| ||||| ||||| |||||
 Db 20 TGCACCAAGCAAGAGGCC 1

RESULT 1361
 ACC86856
 ID ACC86856 standard; DNA; 20 BP.
 AC ACC86856;
 XX
 DT 04-AUG-2003 (first entry)
 XX
 DE Mouse VEGFR-1 chimeric phosphorothioate oligonucleotide SEQ ID NO:151.
 KW Vascular endothelial growth factor receptor 1; VEGF receptor; VEGFR;
 KW inhibitor; cytostatic; antirheumatic; antiarthritic; antiangiogenic;
 KW antiinflammatory; antisense gene therapy; hyperproliferative disorder;
 KW cancer; rheumatoid arthritis; angiogenesis; infection; inflammation;
 KW tumour formation; phosphorothioate; 2'-O-methoxyethyl; 2'-MOE; ss.
 XX
 OS Mus musculus.
 OS Synthetic.
 XX

Key Location/Qualifiers
 FT modified_base 1..20
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "This oligonucleotide has a phosphorothioate
 FT backbone and 2'-O-methoxyethyl (2'-MOE) wings at the 5'
 FT and 3' ends, which are 5 nucleotides in length. Also all
 FT cytidine residues are 5-methylcytidines"
 XX
 FN WO2003022227-A2.
 XX
 PD 20-MAR-2003.
 XX
 PF 12-SEP-2002; 2002WO-US029148.
 XX
 PR 13-SEP-2001; 2001US-00953318.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Bennett CF, Watt AT;
 XX
 DR WPI; 2003-301004/29.
 XX
 PT New antisense oligonucleotide targeted to a nucleic acid encoding
 PT vascular endothelial growth factor receptor-1, useful for diagnosing or
 PT treating cancer, rheumatoid arthritis, or diseases or conditions
 PT involving angiogenesis.
 XX
 PS Claim 3; Page 86; 150pp; English.
 XX

CC The present invention describes a compound (C) 8-50 nucleobases in length
 CC targeted to a nucleic acid molecule encoding vascular endothelial growth
 CC factor receptor-1 (VEGFR-1), where the compound inhibits the expression
 CC of VEGFR-1 and specifically hybridises with the nucleic acid encoding
 CC VEGFR-1 or with an 8-nucleobase portion of an active site on the nucleic
 CC acid molecule encoding VEGFR-1. Also described: (1) a composition
 CC comprising (C) and a carrier or diluent; (2) inhibiting the expression of
 CC VEGFR-1 in cells or tissues by contacting the cells or tissues with (C)
 CC so that the expression of VEGFR-1 is inhibited; and (3) treating an
 CC animal having a disease or condition associated with VEGFR-1 by
 CC administering (C) to the animal so that the expression of VEGFR-1 is
 CC inhibited. (C) has antiangiogenic, antirheumatic, antiarthritic,
 CC cytostatic and antiinflammatory activities, and can be used in antisense
 CC gene therapy. The antisense compounds are useful for modulating the
 CC expression of VEGFR-1 and for treating diseases or conditions associated
 CC with the expression of VEGFR-1, such as hyperproliferative disorders
 CC (e.g. cancer), rheumatoid arthritis, or diseases or conditions involving
 CC angiogenesis. The antisense compounds are also useful for diagnostics,
 CC therapeutics, prophylaxis, e.g. to prevent or delay infection,
 CC inflammation or tumour formation, as research reagents and kits, and in
 CC distinguishing between functions of various members of a biological
 CC pathway. The present sequence represents a mouse VEGFR-2 chimeric
 CC phosphorothioate antisense oligonucleotide, which is used in an example
 CC from the present invention
 XX Sequence 20 BP; 8 A; 5 C; 6 G; 1 T; 0 U; 0 Other;
 SQ

Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 616 GAGGCCTTCTACACACGGA 635
 ||||| ||||| ||||| |||||
 Db 1 GAGGAGTACACACACGGA 20

RESULT 1362
 ABX34264/C
 ID ABX34264 standard; DNA; 20 BP.
 XX
 AC ABX34264;
 XX
 DT 10-FEB-2003 (first entry)
 XX
 DE Antisense oligonucleotide against human SAA4 expression, ISIS 145118.
 KW Human; ss; antisense; serum amyloid A4; SAA4; lipoprotein;
 KW apolipoprotein; high density lipoprotein; HDL; amyloid A; amyloid fibril;
 KW amyloidosis; inhibition; antagonist; diagnosis; antisense therapy;
 KW tumour formation; inflammatory disorder; rheumatoid arthritis;
 KW familial Mediterranean fever.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 PN US6455308-B1.
 XX
 PD 24-SEP-2002.
 XX
 PF 01-AUG-2001; 2001US-00920672.
 XX
 PR 01-AUG-2001; 2001US-00920672.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Freier SM;
 XX
 DR WPI; 2003-066237/06.
 XX
 PT New antisense compounds, useful for inhibiting the expression of serum
 PT amyloid A4, and for diagnosing, preventing or treating diseases
 PT associated with expression of serum amyloid A4, e.g. tumor formation or
 PT inflammatory disorders.
 PT

XX Claim 3; Col 45-46; 42pp; English.

PS The invention discloses antisense oligonucleotides that specifically

XX hybridise with a region encoding human serum amyloid A4 (SAA4) and

CC inhibit its expression. Lipoproteins are globular, micelle-like particles

CC which have been classified into five categories. The protein components

CC of lipoproteins are known as apolipoproteins, and one family of these are

CC the serum amyloid proteins. These apolipoproteins are associated with the

CC high density lipoprotein (HDL) and act as precursors of the amyloid A

CC proteins found in amyloid fibril deposits formed during the process of

CC amyloidosis. The antisense compounds and methods are useful for

CC modulating, (i.e. inhibiting) the expression of serum amyloid A4

CC (antagonists). The compounds are also useful for diagnosing, preventing

CC and treating (using antisense therapy) diseases associated with elevated

CC expression of serum amyloid A4, e.g. tumour formation or inflammatory

CC disorders such as rheumatoid arthritis and familial Mediterranean fever.

CC The antisense compounds can also be used as research reagents and

CC diagnostics, or as tools in differential and/or combinatorial analyses to

CC elucidate expression patterns of a portion or the entire complement of

CC genes expressed within cells or tissues. The sequences presented in

CC ABX34211-ABX34288 are the antisense oligonucleotides which are directed

CC against human SAA4 expression. Each antisense oligonucleotide has a

CC phosphorothioate backbone, all cytidines residues are 5-methylcytidines

CC and bases 1-5 and 16-20 are 2-methoxyethyl (2'-MOE) nucleotides

XX Sequence 20 BP; 4 A; 8 C; 4 G; 4 T; 0 U; 0 Other;

SQ Query Match 0.7%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1659 CTCAGGCGAGCTGCTGGG 1678

Db 20 CTCAGGGAACGGCTGTG 1

RESULT 1363

AAD55430/c

ID AAD55430 standard; DNA; 20 BP.

XX AAD55430;

AC AAD55430;

XX 07-AUG-2003 (first entry)

DT Human FGFR-3 antisense oligonucleotide, ISIS #125110.

XX Human; antisense; fibroblast growth factor receptor 3; prophylaxis;

KW developmental disorder; hyperproliferative disorder; antisense therapy;

KW FGFR-3; ACH; JTK4; CEK2; cancer; phosphorothioate; ss.

XX Homo sapiens.

OS Synthetic.

XX Key

FT Location/Qualifiers

FT modified_base 1..20

FT /tag= a

FT /mod_base= OTHER

FT /note= "Phosphorothioate backbone; All cytidine residues

FT are 5-methylcytidines"

FT modified_base 1..5

FT /tag= b

FT /mod_base= OTHER

FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"

FT modified_base 16..20

FT /tag= c

FT /mod_base= OTHER

FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"

XX WO2003023004-A2.

PN 20-MAR-2003.

XX

PP 06-SEP-2002; 2002WO-US028549.

XX

PR 10-SEP-2001; 2001US-00953047.

XX (ISIS-) ISIS PHARM INC.

PA Monia BP, Wyatt JR;

XX WPI; 2003-313244/30.

DR

XX Novel compound targeted to a nucleic acid molecule encoding fibroblast

PT growth factor receptor 3, useful for inhibiting the expression of the

PT receptor and for treating an animal having cancer or developmental

PT disorder.

XX Claim 3; Page 78; 120pp; English.

PS The invention relates to antisense compounds targetted to a nucleic acid

XX molecule encoding fibroblast growth factor (FGF) receptor 3 (also known

CC as FGFR-3, ACH, JTK4 and CEK2) to inhibit its expression. Antisense

CC compounds of the invention are useful for treating diseases or conditions

CC associated with FGFR-3 such as developmental disorders or

CC hyperproliferative disorders, especially cancer of colorectal, bladder,

CC bone, lung, cervical, breast or skin. They are useful as research

CC reagents, therapeutics, prophylaxis, kits and diagnostics, and as tools

CC in differential and/or combinatorial analyses to elucidate expression

CC patterns of a portion of the genes expressed within cells and tissues.

CC They are also useful in antisense therapy. The present sequence is an

CC antisense oligonucleotide targetted to human FGFR-3

XX Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;

SQ Query Match 0.7%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 242 ATGCTGAGGAGATGACCAAG 261

Db 20 ATCTCGGAGATGACGAAG 1

RESULT 1364

AAD49622/c

ID AAD49622 standard; DNA; 20 BP.

XX AAD49622;

AC AAD49622;

XX 24-MAR-2003 (first entry)

DT Human EPO gene fragment amplifying antisense PCR primer #1.

DE Human; erythropoietin; single nucleotide polymorphism; psoriasis; SNP;

KW acquired immune deficiency syndrome; venereal disease; carcinoma; EPO;

KW autoimmune disease; gastrointestinal disorder; cardiovascular disease;

KW Kaposi's sarcoma; ulcerative colitis; central nervous system disease;

KW renal insufficiency; inflammatory process; radiotherapy; chemotherapy;

KW metabolic disease; Alzheimer's disease; Parkinson's disease; melanoma;

KW schizophrenia; Crohn's disease; rheumatoid arthritis; cancer; obesity;

KW tumour; depression; lymphoma; leukaemia; infection; pneumonia; asthma;

KW genital wart; allergy; multiple myeloma; anaemia; therapy; AIDS; PCR;

KW primer; ss.

XX Homo sapiens.

OS WO200285940-A2.

XX 31-OCT-2002.

PD 29-MAR-2002; 2002WO-EP004331.

XX 04-APR-2001; 2001FR-00004603.

PR 21-DEC-2001; 2001US-0343163P.

PR 04-JAN-2002; 2002US-0345440P.

```
PR 21-FEB-2002; 2002US-0358598P.
XX (GENO-) GENODYSSEE.
PA Escary J;
XX WPI; 2003-093099/08.
XX Novel polypeptide encoded by nucleotide sequence derived from human
XX erythropoietin gene with single nucleotide polymorphisms, for diagnosing,
XX preventing and treating cancers, infections and autoimmune diseases.
XX Example 2; Page 74; 76pp; English.
XX The invention relates to polypeptides encoded by nucleotide sequences
XX derived from human erythropoietin gene (EPO) with single nucleotide
XX polymorphisms. Sequences of the invention are useful for preventing or
XX treating diseases such as cancers and tumours which include melanomas,
XX metastasising renal carcinomas, lymphomas such as follicular lymphomas,
XX and cutaneous T cell lymphoma, leukaemias including chronic lymphocytic
XX leukaemia and chronic myeloid leukaemia, cancers of the liver, neck, head
XX and kidneys, multiple myelomas, carcinoid tumours and tumours that appear
XX following an immune deficiency comprising Kaposi's sarcoma in the case of
XX AIDS; infectious diseases such as viral infections including chronic
XX hepatitis B and C and human immunodeficiency virus (HIV)/acquired immune
XX deficiency syndrome (AIDS) and infectious pneumonias; venereal diseases
XX such as genital warts; immunologically related diseases and/or autoimmune
XX diseases and disorders which include rejection of tissue or organ grafts,
XX allergies, asthma, psoriasis, rheumatoid arthritis, multiple sclerosis,
XX Crohn's disease and ulcerative colitis; cardiovascular diseases such as
XX brain injury and anaemias including anaemia in patients under dialysis in
XX renal insufficiency, as well as anaemia resulting from chronic
XX infections, inflammatory processes, radiotherapies and chemotherapies;
XX metabolic diseases such as non-immune associated diseases such as
XX obesity, central nervous system diseases including Alzheimer's disease,
XX Parkinson's disease, schizophrenia and depression. gastrointestinal
XX disorders and disorders connected with chemotherapy treatments. The
XX present sequence is human EPO gene fragment amplifying PCR primer
XX Sequence 20 BP; 3 A; 8 C; 1 G; 8 T; 0 U; 0 Other;
XX Query Match 0.7%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1401 GGATGAAAAAGAGAGACC 1420
DB 20 GGATGAAAGGAGAGATGATC 1
RESULT 1365
AADS3161/C
XX AAD53161 standard; DNA; 20 BP.
XX AAD53161;
XX 28-MAY-2003 (first entry)
XX Indian hedgehog DNA specific RT-PCR primer, IHR.
XX Chondrocyte; cartilage regeneration; cell therapy; reverse transcription;
XX RT-PCR; primer; ss.
XX Unidentified.
XX WO200295399-A2.
XX 28-NOV-2002.
XX 29-MAR-2002; 2002WO-IB002752.
XX 30-MAR-2001; 2001US-0280242P.
XX
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PA (VTSI-) VTSI VERIGEN TRANSPLANTATION SERVICE INT.
XX Zheng MHD, Xu JD;
XX WPI; 2003-148487/14.
XX Certifying chondrocyte cells for cartilage regeneration, particularly for
XX autologous chondrocyte implantation, comprises collecting and assessing
XX indicators of chondrocyte cell viability in a given chondrocyte cell
XX culture.
XX Example 1; Col 11; 20pp; English.
XX The invention relates to a novel method for certifying chondrocyte cells
XX for use in cartilage regeneration. The method involves collecting data
XX indicating chondrocyte cell viability for use in cartilage regeneration
XX and providing a certification of chondrocyte cell viability including the
XX data. The method is useful for certifying viability of chondrocyte cells
XX for use in cartilage regeneration, particularly for autologous
XX chondrocyte implantation. The method is useful for producing a quality
XX assurance certificate for a given chondrocyte cell culture. It may also
XX be used for determining the likelihood of hyaline cartilage regeneration
XX in a patient with a cartilage defect. The invention is also useful for
XX cell therapy. The present sequence is Indian hedgehog DNA specific RT-PCR
XX primer used for the characterisation of chondrocytes. This sequence is
XX used in the exemplification of the invention
XX Sequence 20 BP; 6 A; 4 C; 7 G; 3 T; 0 U; 0 Other;
XX Query Match 0.7%; Score 13.6; DB 1; Length 20;
XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 540 CATCTCGAAGCTGCTAAAGT 559
DB 20 CCTCTCGAAGCTGCTGACT 1
RESULT 1366
ABZ23475
XX ABZ23475 standard; DNA; 20 BP.
XX AC ABZ23475;
XX 07-APR-2003 (first entry)
XX Primer used to amplify a fragment of Anseriform fish DNA.
XX Mitochondrial DNA; chloroplast DNA; DNA identification; fish;
XX food adulteration; vertebrate; PCR; primer; ss.
XX Synthetic.
XX WO2002101090-A2.
XX 19-DEC-2002.
XX 13-JUN-2002; 2002WO-FR002030.
XX 13-JUN-2001; 2001FR-00007736.
XX (CNRS ) CENT NAT RECH SCI.
XX (UYDI-) UNIV LYON 1 BERNARD CLAUDE.
XX (ECOL-) ECOLE NORMALE SUPERIEURE DE LYON.
XX Donne-Gousse C, Laudet V, Haenni C;
XX WPI; 2003-148820/14.
XX Detecting and identifying a mixture of organic materials, useful e.g. for
XX determining adulteration of foods, by detecting cloned mitochondrial or
XX chloroplastic DNA.
XX
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PS Example 3; Page 29; 58pp; French.
XX
CC The specification describes a method for determining the existence of
CC animal or vegetable mixtures in organic substrates. The method uses a a
CC cloning product for determining the existence of a mixture containing
CC mitochondrial or chloroplast DNA of different species, populations or
CC races, of animals and/or plants, and/or of different human beings. The
CC method is useful for detecting and identifying DNA of different origins
CC in a mixture, particularly to determine adulteration of foods or in
CC forensic studies. PCR primers AB223474-75 were used to amplify a 203 bp
CC fragment of Anseriform fish DNA (see AB223476). The primers were used to
CC demonstrate the detection and identification of a mixture of fish
CC species, using the method of the invention
XX
XX Sequence 20 BP; 13 A; 2 C; 4 G; 1 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1406 AAAAAGAGAAAGACCCAGAG 1425
DB 1 AAAAATAAAGGAACCCAGAG 20
RESULT 1367
AAL53968
ID AAL53968 standard; DNA; 20 BP.
XX
AC AAL53968;
DT 18-FEB-2003 (first entry)
XX
DE DNA mutation detection related ribonucleotide, SEQ ID No 18.
XX
KW Detecting; point mutation; hybridising; target DNA; duplex; RNase H;
KW single nucleotide polymorphism; ss.
XX
OS Unidentified.
XX
PN US2002142308-A1.
XX
PD 03-OCT-2002.
XX
PF 30-MAR-2001; 2001US-00823634.
XX
PR 30-MAR-2001; 2001US-00823634.
XX
PA (DATA/) DATTA Gupta N.
PA (TSEN/) TSENG T.
PI Dattagupta N, Tseng T;
XX
XX WPI; 2003-102506/09.
XX
XX Detecting point mutation in DNA strand, by hybridizing target DNA strand
XX having mutation with test DNA strand to form duplex, contacting the
XX duplex with RNase H and determining the cleavage of test strand by RNase
XX H.
PS Example 5; Fig 4; 26pp; English.
XX
XX The invention relates to a novel method for detecting a point mutation in
XX a DNA strand. The novel method comprises hybridising a target DNA strand
XX containing or suspected of containing a point mutation with a test
XX nucleic acid strand complementary to the DNA strand to form a target DNA
XX strand/test nucleic acid strand duplex, contacting the duplex with an
XX RNase H, and determining whether the ribonucleotide residues within the
XX nucleotide sequence are cleaved by RNase H. The method is useful for
XX detecting a point mutation in a DNA strand, where the point mutation to
XX be detected is a single nucleotide polymorphism, preferably a
XX polymorphism in a genome, e.g., a viral, bacterial, eukaryotic, mammalian
XX or human genome. The method is useful to detect any nucleic acids from

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CC any species of organisms such as Acinetobacter, Bacillus, Candida,
CC Enterococcus, Haemophilus, Mycobacterium and Streptococcus, and viruses.
CC This polynucleotide sequence represents a ribonucleotide relating to the
CC mutation detecting method of the invention
XX
XX Sequence 20 BP; 17 A; 0 C; 0 G; 3 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1608 AAAAATTTTAAATATATAA 1627
DB 1 AAAAATAATTAATAAANA 20
RESULT 1368
ABT32521/C
ID ABT32521 standard; DNA; 20 BP.
XX
XX ABT32521;
AC ABT32521;
DT 08-MAY-2003 (first entry)
XX
DE Neuroblastoma-related oligonucleotide #298.
XX
KW Neuroblastoma; prognosis; spontaneous regression; primer; probe; ds;
KW high malignancy.
XX
OS Unidentified.
XX
PN WC200297093-A1.
XX
PD 05-DEC-2002.
XX
PF 30-MAY-2002; 2002WO-JP005294.
XX
PR 30-MAY-2001; 2001JP-00162775.
XX
PR 24-AUG-2001; 2001JP-00255226.
XX
PA (CHIB-) CHIBA PREFECTURE.
PA (HISM) HISAMITSU PHARM CO LTD.
XX
XX Nakagawara A;
XX
XX WPI; 2003-140476/13.
XX
XX Nucleic acids having higher expression in human neuroblastoma with poor
XX prognosis for diagnostic prediction of neuroblastoma prognosis.
XX Example 5; Page 28; 11pp; Japanese.
XX
XX The invention comprises nucleic acids that show increased expression in
XX human neuroblastomas with poor prognosis over those with a good
XX prognosis. The nucleic acids of the invention are useful as a tool for
XX distinguishing neuroblastomas with a favourable prognosis (spontaneous
XX regression) from neuroblastomas with a poor prognosis (high malignancy).
XX The DNA sequences ABT32224 - ABT32571 represent oligonucleotides used in
XX an example of the invention
XX
XX Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
SQ
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1134 GTACCTGGAGAGATCAAC 1153
DB 20 GTTCTGGTGAAGAGCAAGC 1
RESULT 1369
ABT32257

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CC prognosis. The nucleic acids of the invention are useful as a tool for
CC distinguishing neuroblastomas with a favourable prognosis (spontaneous
CC regression) from neuroblastomas with a poor prognosis (high malignancy).
CC The DNA sequences ABR2224 - ABR32571 represent oligonucleotides used in
CC an example of the invention
XX
SQ Sequence 20 BP; 8 A; 3 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1449 GGAGAAAACCAAGGAGAGA 1468
Db 1 GGAGCAATCCAGGAGATGA 20

RESULT 1372
ACF39637/C
ID ACF39637 standard; DNA; 20 BP.
XX ACF39637;
XX
DT 29-SEP-2003 (first entry)
XX
DE MHC class II transactivator antisense oligonucleotide SEQ ID NO:40.
XX
KW Human; major histocompatibility complex class II transactivator;
KW MHC class II transactivator; antisense modulation; immunosuppressive;
KW antimicrobial; antidiabetic; antirheumatic; antiarthritic; cytostatic;
KW neurotropic; neuroprotective; immunostimulant; autoimmune disorder;
KW MHC class II transactivator inhibitor; infection; transplant rejection;
KW diabetes; rheumatoid arthritis; cancer; Alzheimer's disease;
KW multiple sclerosis; severe combined immunodeficiency disease;
KW phosphorothioate; antisense oligonucleotide; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
FT /mod_base= OTHER
FT /note= "2'-O-methoxyethyls"
XX WO2003050247-A2.
XX
PD 19-JUN-2003.
XX
PF 04-DEC-2002; 2002WO-US038616.
XX
PR 05-DEC-2001; 2001US-00006366.
XX
XX (ISIS-) ISIS PHARM INC.
XX
PI Bennett FC, Dobie KW;
XX
DR WPI; 2003-577294/54.
XX
XX New antisense oligonucleotides for modulating MHC class II transactivator
PT gene expression, particularly useful for treating autoimmune disorders
PT such as transplant rejection, Alzheimer's disease, or multiple sclerosis,
PT or infection.
XX

PS Example 15; Page 83; 129pp; English.
XX
CC The present invention describes a compound (I) that is 8-50 nucleobases
CC in length: (a) targets a nucleic acid molecule encoding major
CC histocompatibility complex (MHC) class II transactivator, and
CC specifically hybridises with the nucleic acid encoding the MHC class II
CC transactivator, and inhibits the expression of MHC class II
CC transactivator; or (b) specifically hybridises with at least an 8-
CC nucleobase portion of an active site on a nucleic acid molecule encoding
CC MHC class II transactivator. (I) has immunosuppressive, antimicrobial,
CC antidiabetic, antirheumatic, antiarthritic, cytostatic, neurotropic,
CC neuroprotective and immunostimulant activities, and can be used as an MHC
CC class II transactivator inhibitor. The MHC class II transactivator
CC antisense oligonucleotides can be used for treating an animal having a
CC disease or condition associated with MHC class II transactivator, e.g.
CC autoimmune disorder or infection. The antisense oligonucleotides can be
CC used for inhibiting the expression of MHC class II transactivator in
CC cells or tissues. In particular, these diseases include transplant
CC rejection, diabetes, rheumatoid arthritis, cancer, Alzheimer's disease,
CC multiple sclerosis, or severe combined immunodeficiency disease. The
CC antisense compounds are useful for diagnostics, prophylaxis, or as
CC research reagents or kits. The present sequence represents a human MHC
CC class II transactivator chimeric phosphorothioate antisense
CC oligonucleotide, which is used in an example from the present invention
XX
SQ Sequence 20 BP; 3 A; 8 C; 6 G; 3 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1492 GAGGAGGTCACAGTGGCCGTG 1511
Db 20 GAGCTGGCCACAGTGGCCGTG 1

RESULT 1373
AAL61797
ID AAL61797 standard; DNA; 20 BP.
XX
AC AAL61797;
XX
DT 22-SEP-2003 (first entry)
XX
DE Human ETBR-LP-2 antisense oligonucleotide ISIS #204223.
XX
KW Human; G protein-coupled receptor; hyperproliferative disorder; GPR37L1;
KW endothelin type b receptor-like protein-2; cerebral vascular disease;
KW antisense; endothelin-binding receptor-like protein-2; atherosclerosis;
KW cardiovascular disease; ETBR-LP-2; G-protein coupled receptor 37 like 1;
KW acute proliferative nephropathy; ETBR-like protein 2; cancer; stroke;
KW angiogenesis; hypertension; phosphorothioate; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "phosphorothioate backbone; All cytidine residues
FT are 5-methylcytidines"
FT modified_base 1..5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
FT modified_base 16..20
FT /*tag= c
FT /mod_base= OTHER
FT /note= "2'-methoxyethyl (2'-MOE) nucleotides"
XX WO2003050244-A2.
XX

PD 19-JUN-2003.
 XX
 PF 04-DEC-2002; 2002WO-US038520.
 XX
 PR 06-DEC-2001; 2001US-00003126.
 XX
 PA (ISIS-) ISIS PHARM INC.
 XX
 PI Monia BP, Freier SM;
 XX
 XX WPI; 2003-558997/52.
 DR
 XX
 PT New oligonucleotides which bind the nucleic acid encoding the G protein
 PT coupled receptor ETBR-LP-2 (endothelin type b receptor-like protein-2
 PT receptor), useful for treating e.g. cancer and cardiovascular diseases.
 XX
 XX Claim 3; Page 79; 106pp; English.
 PS
 CC The invention relates to antisense compounds targetted to the nucleic
 CC acid encoding the G protein-coupled receptor ETBR-LP-2 (endothelin type b
 CC receptor-like protein-2) to inhibit its expression. ETBR-LP-2 is also
 CC known as endothelin-binding receptor-like protein-2, ETBR-like protein 2
 CC and G-protein coupled receptor 37 like 1 (GPR37L1). Antisense compounds
 CC of the invention are useful for treating hyperproliferative disorders
 CC (especially cancer) and cardiovascular diseases especially angiogenesis,
 CC atherosclerosis, hypertension, cerebral vascular disease, stroke and
 CC acute proliferative nephropathy. The present sequence is an antisense
 CC oligonucleotide targetted to human ETBR-LP-2 DNA
 XX
 SQ Sequence 20 BP; 3 A; 7 C; 5 G; 5 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1177 ATGCTGCGCAGCAGCCTGG 1196
 DB 1 ATACTGTCAGCGCCCTGG 20
 RESULT 1374
 ADA11440
 ID ADA11440 standard; DNA; 20 BP.
 AC
 AC ADA11440;
 XX
 XX 06-NOV-2003 (first entry)
 DT
 XX Human chromosome 21 sequence exon 2 partial DNA sequence #1.
 DE
 XX ds; human; primer design; cancer; disease analysis.
 KW
 XX Homo sapiens.
 OS
 XX US2003097223-A1.
 PN
 XX 22-MAY-2003.
 PD
 XX 20-AUG-2002; 2002US-00223374.
 PF
 XX 14-DEC-1999; 99JP-00355080.
 PR
 XX 17-MAR-2000; 2000US-00527440.
 PR
 XX (HITA) HITACHI LTD.
 PA
 XX Nakae H, Ihara S;
 PI
 XX WPI; 2003-597353/56.
 DR
 XX
 XX Primer design system for DNA analysis, predicts several exons
 PT corresponding to selected genomic DNA nucleotide sequence, and designs
 PT primer pairs using predicted exons as template.
 PT
 XX

PS Example 1; Fig 6; 36pp; English.
 XX
 CC The invention relates to a selecting unit which selects one genomic DNA
 CC nucleotide sequence from a database storing several sequences. Several
 CC exons of the selected sequence, are predicted and the positions of the
 CC predicted exons are stored. Several primer pairs are simultaneously
 CC designed, using the predicted exons as a template. The primer pairs are
 CC collated with the exons and the nucleotide sequences. The invention is
 CC useful for DNA analysis used for the analysis of disease e.g. cancer. The
 CC primers are efficiently designed for various genes, since the exons are
 CC predicted for the selected genomic DNA nucleotide sequence and the
 CC several primer pairs are simultaneously designed based on the predicted
 CC exons. The present sequence represents partial DNA sequence #1 derived
 CC from exon 2 of a sequence selected from human chromosome 21.
 XX
 SQ Sequence 20 BP; 9 A; 5 C; 6 G; 0 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1415 AAGACCCAGAGAGAGAAA 1434
 DB 1 AAGACCCAGAGAGAGAGAA 20
 RESULT 1375
 ACH11146
 ID ACH11146 standard; DNA; 20 BP.
 AC
 AC ACH11146;
 XX
 XX 08-OCT-2003 (first entry)
 DT
 XX Human protein kinase C-alpha targeted oligonucleotide ISIS#3884.
 DE
 XX Human; ss; antisense; PKC; protein kinase C; hyperproliferation; tumour;
 KW inflammation; psoriasis; cancer; non-small cell lung cancer; lung cancer;
 KW non-Hodgkin's lymphoma; glioblastoma; bladder cancer; colon cancer;
 KW breast cancer; ovarian cancer; pancreatic cancer.
 XX
 OS Homo sapiens.
 XX
 XX US6537973-B1.
 PN
 XX 25-MAR-2003.
 PD
 XX 18-DEC-2001; 2001US-00025139.
 PF
 XX 16-MAR-1992; 92US-00852852.
 PR
 XX 09-JUL-1993; 93US-00089996.
 PR
 XX 07-JUN-1995; 95US-00478178.
 PR
 XX 31-MAR-1997; 97US-00829637.
 XX
 XX (ISIS-) ISIS PHARM INC.
 PA
 XX Bennett CF, Dean NM, Holmlund JT, Dorrr FA;
 PI
 XX WPI; 2003-531084/50.
 DR
 XX New pharmaceutical composition, useful for treating cancer, e.g., non-
 XX small cell lung cancer or non-Hodgkin's lymphoma.
 PT
 XX Example 1; Col 13-14; 56pp; English.
 PS
 CC The invention relates to a new pharmaceutical composition comprising: (a)
 CC an oligonucleotide sequence having up to 50 base pairs (bp); and (b)
 CC carboplatin and paclitaxel, cisplatin and gemcitabine, 5-fluorouracil and
 CC leucovorin, or docetaxel. The pharmaceutical composition is useful for
 CC treating diseases associated with protein kinase C such as
 CC hyperproliferative and inflammatory conditions e.g. psoriasis, tumours
 CC and cancer e.g. non-small cell lung cancer, non-Hodgkin's lymphoma,
 CC glioblastoma, bladder cancer, lung cancer, colon cancer, breast cancer,
 CC

CC ovarian cancer and pancreatic cancer. The present sequence represents an
CC antisense oligonucleotide targeted against protein kinase C
XX
SQ Sequence 20 BP; 9 A; 4 C; 6 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1409 AAGAGAGAGAGAGAGAG 1428
||||| ||||| ||||| ||||| |||||
Db 1 AAGAGAGAGAGAGAGAG 20

RESULT 1376
ADB25676/c
ID ADB25676 standard; DNA; 20 BP.
XX
AC ADB25676;
XX
XX 20-NOV-2003 (first entry)
XX
DE Human connective tissue growth factor antisense oligo DNA (SeqID 69).
XX
KW antisense; human; ss; connective tissue growth factor; CTGF;
KW chromosome 6q23.1; ctgofact; fibroblast inducible secreted protein;
KW fisp-12; NOV2;
KW insulin-like growth factor binding protein-related protein 2; IGFBP-rP2;
KW IGFBP-8; Hsc24; ecogenin; acute lymphoblastic leukaemia; gene therapy;
KW hyperproliferative disorder; cancer; pulmonary fibrosis; renal fibrosis;
KW scleroderma; atherosclerosis; cytostatic; dermatological;
KW antiarteriosclerotic.
XX
OS Homo sapiens.
XX
XX
FH Key Location/Qualifiers
FT modified_base 1..20
FT /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= phosphorothioate backbone, where 1-5 and
FT 16-20 are 2' methoxyethyl nucleotides. All cytidines are
FT 5-methylcytidines"
XX
XX WO2003053340-A2.
XX
XX 03-JUL-2003.
XX
XX 09-DEC-2002; 2002WO-US038618.
XX
XX 10-DEC-2001; 2001US-00006191.
XX (ISIS-) ISIS PHARM INC.
XX
XX Gaarde WA, Watt AT;
XX
XX WPI; 2003-559091/52.
XX
XX
XX New antisense oligonucleotides for modulating connective tissue growth
XX factor expression, particularly useful for treating cancers (e.g. breast
XX or prostate cancer), pulmonary or renal fibrosis, scleroderma or
XX atherosclerosis.
XX
XX Example 15; Page 86; 139pp; English.
XX
XX This invention relates to novel methods for modulating the expression of
XX connective tissue growth factor (CTGF) by antisense oligonucleotides.
XX CTGF has been mapped to human chromosome region 6q23.1, and is also known
XX as ctgofact, fibroblast inducible secreted protein, fisp-12, NOV2,
XX insulin-like growth factor binding protein-related protein 2, IGFBP-rP2,
XX IGFBP-8, Hsc24 and ecogenin. It is known to stimulate DNA synthesis and
XX promote chemotaxis of fibroblasts, however, it is also upregulated in
XX acute lymphoblastic leukaemia and in tumour or endothelial cells
XX associated with the vasculature. Accordingly, antisense oligonucleotides

CC that inhibit the expression of CTGF in cells or tissues can be used in
CC gene therapy to treat various conditions including hyperproliferative
CC disorders (particularly cancer, e.g. breast, prostate or renal cancer),
CC pulmonary fibrosis, renal fibrosis, scleroderma and atherosclerosis. As
CC such, the present invention describes these antisense oligos as having
CC cytostatic, dermatological and antiarteriosclerotic activities. This
CC oligonucleotide sequence is a chimeric phosphorothioate antisense oligo
CC with 2' MOE wings and a deoxy gap, which is used to inhibit expression of
CC human CTGF of the invention.
XX
SQ Sequence 20 BP; 2 A; 5 C; 9 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1260 CGACCCCTGCACAGCGCATCT 1279
||||| ||||| ||||| ||||| |||||
Db 20 CGACCCCTGCACAGCGCATCT 1

RESULT 1377
ABT43840/c
ID ABT43840 standard; DNA; 20 BP.
XX
AC ABT43840;
XX
XX 06-NOV-2003 (first entry)
XX
DE PCR primer 3 used to amplify the human CDSN gene exon 2.
XX
KW Human; corneodesmosin; CDSN; hair loss; autoimmune disorder; psoriasis;
KW neurological; hormonal; nonsyndromic alopecia; male pattern baldness; ss;
KW hytrichosis simplex of the scalp; HSS; hyperkeratotic cutaneous disease;
KW winter xerosis; ichthyoses; dermatological; gene therapy; PCR; primer.
XX
XX Homo sapiens.
XX
XX WO2003050311-A2.
XX
XX 19-JUN-2003.
XX
XX 09-DEC-2002; 2002WO-US039485.
XX
XX 07-DEC-2001; 2001US-0338188P.
XX (WELA) WELLA AG.
XX
XX Pras E, Levy-Nissenbaum E, Frydman M, Thederahn T;
XX WPI; 2003-569100/53.
XX
XX Therapeutic composition comprising an effector of a corneodesmosin gene
XX function associated with hair growth and a carrier, useful for treating
XX alopecia, particularly hytrichosis simplex of the scalp (HSS).
XX
XX Example 1; Page 20; 37pp; English.
XX
XX This invention relates to the identification of genes linked to hair loss
XX and the retardation of hair growth. Alopecia is the general term used to
XX refer to loss of hair, the causes of which can include autoimmune
XX disorders, hormonal imbalances, neurological conditions and genetic
XX abnormalities. Specifically, the invention describes the highly conserved
XX corneodesmosin (CDSN) gene and encoded protein thereof that play a role
XX in the onset of nonsyndromic alopecia, an example being hytrichosis
XX simplex of the scalp (HSS). Furthermore, human CDSN (localised to
XX chromosome 6) is overexpressed in many hyperkeratotic cutaneous diseases
XX including winter xerosis, psoriasis and various ichthyoses. Accordingly
XX the dermatological activity of CDSN provides a good diagnostic and
XX therapeutic target for alopecia, and through gene therapy CDSN can be
XX used to modulate hair growth and treat male pattern baldness. This
XX oligonucleotide sequence is a PCR primer used to amplify the human
XX corneodesmosin gene of the invention

XX SQ Sequence 20 BP; 8 A; 1 C; 10 G; 1 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1539 GCTGAGTCCCTCAGCTTCT 1558
 ||| ||||| |||||
 Db 20 GCTTCTCTCCTCAGCTTCT 1

RESULT 1378
 ACD05056
 ID ACD05056 standard; DNA; 20 BP.
 XX AC ACD05056;
 XX DT 05-AUG-2003 (first entry)
 XX DE Tumour necrosis factor alpha antisense oligonucleotide #61.
 XX KW Tumour necrosis factor alpha; TNF-alpha; antiinflammatory; antirheumatic;
 KW antiarthritic; antidiabetic; dermatological; hepatotropic; antiasthmatic;
 KW inflammatory disorder; inflammatory bowel disease; Crohn's disease;
 KW colitis; rheumatoid arthritis; diabetes; pancreatitis;
 KW multiple sclerosis; atopic dermatitis; asthma; hepatitis;
 KW antisense technology; ss.
 XX OS Synthetic.
 XX PN US2003022848-A1.
 XX PD 30-JAN-2003.
 XX PF 02-APR-2001; 2001US-00824322.
 XX PR 05-OCT-1998; 98US-00166186.
 XX PR 18-MAY-1999; 99US-00313932.
 XX PA (BAKE/) BAKER B F.
 PA (BENN/) BENNETT C F.
 PA (BUTL/) BUTLER M M.
 PA (SHAN/) SHANAHAN W R.
 XX PI Baker BF, Bennett CF, Butler MM, Shanahan WR;
 XX WPI; 2003-447433/42.
 XX PT Treating inflammatory disorders such as inflammatory bowel disease,
 PT Crohn's disease or rheumatoid arthritis, in a subject, by administering
 PT oligonucleotide which inhibits expression of human tumor necrosis factor
 PT alpha.
 XX PS Example 6; Page 18; 142pp; English.
 XX CC The invention describes a method of treating an inflammatory disorder in
 CC an individual, comprising administering to the individual an
 CC oligonucleotide upto 30 nucleotides in length complementary to a nucleic
 CC acid molecule encoding human tumor necrosis factor (TNF)-alpha. The
 CC method is useful for treating an inflammatory disorder such as
 CC inflammatory bowel disease, Crohn's disease, colitis or rheumatoid
 CC arthritis, in an individual. The method is also useful for treating
 CC diabetes, pancreatitis, multiple sclerosis, atopic dermatitis, asthma,
 CC and hepatitis in an individual. This sequence represents an antisense
 CC oligonucleotide used to modulate expression of tumour necrosis factor
 CC alpha (TNF-alpha)
 XX SQ Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 845 GTGGCTCAGACTCCCTATCT 864
 ||| ||||| |||||
 Db 1 GTGTGCCAGACACCCCTATCT 20

RESULT 1379
 ACD05140
 ID ACD05140 standard; DNA; 20 BP.
 XX AC ACD05140;
 XX DT 05-AUG-2003 (first entry)
 XX DE Tumour necrosis factor alpha antisense oligonucleotide #143.
 XX KW Tumour necrosis factor alpha; TNF-alpha; antiinflammatory; antirheumatic;
 KW antiarthritic; antidiabetic; dermatological; hepatotropic; antiasthmatic;
 KW inflammatory disorder; inflammatory bowel disease; Crohn's disease;
 KW colitis; rheumatoid arthritis; diabetes; pancreatitis;
 KW multiple sclerosis; atopic dermatitis; asthma; hepatitis;
 KW antisense technology; ss.
 XX OS Synthetic.
 XX PN US2003022848-A1.
 XX PD 30-JAN-2003.
 XX PF 02-APR-2001; 2001US-00824322.
 XX PR 05-OCT-1998; 98US-00166186.
 XX PR 18-MAY-1999; 99US-00313932.
 XX PA (BAKE/) BAKER B F.
 PA (BENN/) BENNETT C F.
 PA (BUTL/) BUTLER M M.
 PA (SHAN/) SHANAHAN W R.
 XX PI Baker BF, Bennett CF, Butler MM, Shanahan WR;
 XX WPI; 2003-447433/42.
 XX PT Treating inflammatory disorders such as inflammatory bowel disease,
 PT Crohn's disease or rheumatoid arthritis, in a subject, by administering
 PT oligonucleotide which inhibits expression of human tumor necrosis factor
 PT alpha.
 XX PS Example 21; Page 36; 142pp; English.
 XX CC The invention describes a method of treating an inflammatory disorder in
 CC an individual, comprising administering to the individual an
 CC oligonucleotide upto 30 nucleotides in length complementary to a nucleic
 CC acid molecule encoding human tumor necrosis factor (TNF)-alpha. The
 CC method is useful for treating an inflammatory disorder such as
 CC inflammatory bowel disease, Crohn's disease, colitis or rheumatoid
 CC arthritis, in an individual. The method is also useful for treating
 CC diabetes, pancreatitis, multiple sclerosis, atopic dermatitis, asthma,
 CC and hepatitis in an individual. This sequence represents an antisense
 CC oligonucleotide used to modulate expression of tumour necrosis factor
 CC alpha (TNF-alpha)
 XX SQ Sequence 20 BP; 4 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 844 TGTGCTCAGACTCCCTATC 863
 ||| ||||| |||||
 Db 1 TGTGTGCCAGACACCCCTATC 20

```

RESULT 1380
ACD05231/c
ID ACD05231 standard; DNA; 20 BP.
XX
XX
AC ACD05231;
XX
XX
DT 05-AUG-2003 (first entry)
DE Tumour necrosis factor alpha antisense oligonucleotide #234.
XX
XX
KW Tumour necrosis factor alpha; TNF-alpha; antiinflammatory; antirheumatic;
KW antiarthritic; antidiabetic; dermatological; hepatotropic; antiasthmatic;
KW inflammatory disorder; inflammatory bowel disease; Crohn's disease;
KW colitis; rheumatoid arthritis; diabetes; pancreatitis;
KW multiple sclerosis; atopic dermatitis; asthma; hepatitis;
KW antisense technology; ss.
XX
XX
OS Synthetic.
XX
XX
PN US2003022848-A1.
XX
XX
PD 30-JAN-2003.
XX
XX
PF 02-APR-2001; 2001US-00824322.
XX
XX
PR 05-OCT-1998; 98US-00166186.
XX
XX
PR 18-MAY-1999; 99US-00313932.
XX
XX
PA (BAKE/) BAKER B F.
PA (BENN/) BENNETT C F.
PA (BUTL/) BUTLER M M.
PA (SHAN/) SHANAHAN W R.
XX
XX
PI Baker BF, Bennett CF, Butler MM, Shanahan WR;
XX
XX
WPI; 2003-447433/42.
XX
XX
PT Treating inflammatory disorders such as inflammatory bowel disease,
PT Crohn's disease or rheumatoid arthritis, in a subject, by administering
PT oligonucleotide which inhibits expression of human tumor necrosis factor
PT alpha.
XX
XX
PS Example 22; Page 37; 142pp; English.
XX
XX
CC The invention describes a method of treating an inflammatory disorder in
CC an individual, comprising administering to the individual an
CC oligonucleotide upto 30 nucleotides in length complementary to a nucleic
CC acid molecule encoding human tumor necrosis factor (TNF)-alpha. The
CC method is useful for treating an inflammatory disorder such as
CC inflammatory bowel disease, Crohn's disease, colitis or rheumatoid
CC arthritis, in an individual. The method is also useful for treating
CC diabetes, pancreatitis, multiple sclerosis, atopic dermatitis, asthma,
CC and hepatitis in an individual. This sequence represents an antisense
CC oligonucleotide used to modulate expression of tumour necrosis factor
CC alpha (TNF-alpha)
XX
XX
SQ Sequence 20 BP; 6 A; 5 C; 3 G; 6 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 241 AATGCTGAGGAGATGACCAA 260
DB ||||||| |||||||
20 AATGCTGATTGGTGACCAA 1

RESULT 1381
ACD05480/c
ID ACD05480 standard; DNA; 20 BP.
XX
XX
AC ACD05480;
XX

```

```

DT 05-AUG-2003 (first entry)
XX
XX
DE Tumour necrosis factor alpha antisense oligonucleotide #493.
XX
XX
KW Tumour necrosis factor alpha; TNF-alpha; antiinflammatory; antirheumatic;
KW antiarthritic; antidiabetic; dermatological; hepatotropic; antiasthmatic;
KW inflammatory disorder; inflammatory bowel disease; Crohn's disease;
KW colitis; rheumatoid arthritis; diabetes; pancreatitis;
KW multiple sclerosis; atopic dermatitis; asthma; hepatitis;
KW antisense technology; ss.
XX
XX
OS Synthetic.
XX
XX
PN US2003022848-A1.
XX
XX
PD 30-JAN-2003.
XX
XX
PF 02-APR-2001; 2001US-00824322.
XX
XX
PR 05-OCT-1998; 98US-00166186.
XX
XX
PR 18-MAY-1999; 99US-00313932.
XX
XX
PA (BAKE/) BAKER B F.
PA (BENN/) BENNETT C F.
PA (BUTL/) BUTLER M M.
PA (SHAN/) SHANAHAN W R.
XX
XX
PI Baker BF, Bennett CF, Butler MM, Shanahan WR;
XX
XX
WPI; 2003-447433/42.
XX
XX
PT Treating inflammatory disorders such as inflammatory bowel disease,
PT Crohn's disease or rheumatoid arthritis, in a subject, by administering
PT oligonucleotide which inhibits expression of human tumor necrosis factor
PT alpha.
XX
XX
PS Example 24; Page 40; 142pp; English.
XX
XX
CC The invention describes a method of treating an inflammatory disorder in
CC an individual, comprising administering to the individual an
CC oligonucleotide upto 30 nucleotides in length complementary to a nucleic
CC acid molecule encoding human tumor necrosis factor (TNF)-alpha. The
CC method is useful for treating an inflammatory disorder such as
CC inflammatory bowel disease, Crohn's disease, colitis or rheumatoid
CC arthritis, in an individual. The method is also useful for treating
CC diabetes, pancreatitis, multiple sclerosis, atopic dermatitis, asthma,
CC and hepatitis in an individual. This sequence represents an antisense
CC oligonucleotide used to modulate expression of tumour necrosis factor
CC alpha (TNF-alpha)
XX
XX
SQ Sequence 20 BP; 6 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 240 CAATGCTGAGGAGATGACCA 259
DB ||||||| |||||||
20 CAATGCTGATTGGTGACCA 1

RESULT 1382
ADB65830
ID ADB65830 standard; DNA; 20 BP.
XX
XX
AC ADB65830;
XX
XX
DT 04-DEC-2003 (first entry)
XX
XX
DE Clone specific PCR primer #31.
XX
XX
KW Pharmaceutical; diagnostic; gene therapy; tissue regeneration;
KW cell regeneration; membrane protein; signal transduction-related protein;

```


ID ADB98568 standard; DNA; 20 BP.
AC ADB98568;
XX
DT 04-DEC-2003 (first entry)
XX
DE Sequence tagged site #449 used to prepare Zmax1 (LRP5) gene region map.
DE DE
KW Osteopathic; Gene therapy; High Bone Mass; HBM; LRP5; Zmax1; LRP6;
KW bone mass modulation; osteoporosis; STS; sequence tagged site; ds.
XX
OS Homo sapiens.
XX
PN WO200292000-A2.
XX
PD 21-NOV-2002.
XX
PF 13-MAY-2002; 2002WO-US014877.
XX
PR 11-MAY-2001; 2001US-0290071P.
PR 17-MAY-2001; 2001US-0291311P.
PR 01-FEB-2002; 2002US-0353058P.
PR 04-MAR-2002; 2002US-0361293P.
XX
PA (GENO-) GENOME THERAPEUTICS CORP.
PA (AMHP) WYETH.
XX
PI Allen K, Anisowicz A, Graham JR, Morales A, Yaworsky PJ, Liu W;
XX
DR WPI; 2003-129214/12.
XX
PT New nucleic acid comprising a mutation in LRP5 or LRP6, useful for
PT diagnosing a HBM-like phenotype in a subject and for preparing a
PT composition for modulating bone mass and/or lipid levels in a subject
PT suffering from e.g. osteoporosis.
XX
PS Example 2; Page 64; 629pp; English.
XX
CC The present invention relates to High Bone Mass (HBM), LRP5 (Zmax1) and
CC LRP6 mutants, which results in a HBM-like phenotype when expressed in a
CC cell. The HBM-like phenotype results in bone mass modulation and/or lipid
CC level modulation. The invention is useful for diagnosing a HBM-like
CC phenotype in a subject and for preparing a composition for modulating
CC bone mass and/or lipid levels in a subject suffering from e.g.
CC osteoporosis. The present sequence is a sequence tagged site (STS)
CC marker, which was used to prepare a physical map of the Zmax1 (LRP5) gene
CC region.
XX
SQ Sequence 20 BP; 8 A; 4 C; 7 G; 1 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1273 CGCATCTCGATCTGCTCTC 1292
Db ||| ||||| |||||
20 CGCTTGTGATCTTCTCTC 1

RESULT 1385
ADC65761/c
ID ADC65761 standard; DNA; 20 BP.
XX
AC ADC65761;
XX
DT 18-DEC-2003 (first entry)
XX
DE Human TGF-beta receptor II targeted antisense oligonucleotide #38.
DE
KW human; antisense oligonucleotide;
KW transforming growth factor beta receptor II; TGF-beta receptor II;
KW hyperproliferative disorder; breast cancer; autoimmune disorder;
KW rheumatoid arthritis; 2'-O-methoxyethyl gapmer;

KW phosphorothioate backbone; ss.
XX
OS Homo sapiens.
XX
PN WO2003000656-A2.
XX
XX 03-JAN-2003.
XX
PF 19-JUN-2002; 2002WO-US019665.
XX
PR 21-JUN-2001; 2001US-00888361.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Murray SP, Wyatt JR;
XX
DR WPI; 2003-175279/17.
XX
PT New compound having a sequence targeted to a nucleic acid encoding a
PT transforming growth factor beta-receptor II, useful for preparing a
PT composition for treating hyperproliferative disorder e.g., lung, liver,
PT colon or gastric cancer.
XX
PS Claim 3; SEQ ID NO 57; 141pp; English.
XX
CC The invention comprises antisense oligonucleotides that are targeted to
CC the nucleic acid encoding transforming growth factor beta (TGF-beta)
CC receptor II. The antisense oligonucleotides of the invention are useful
CC for treating hyperproliferative disorders (e.g. breast cancer), or an
CC autoimmune disorder (e.g. rheumatoid arthritis). The present DNA sequence
CC represents a 2'-O-methoxyethyl gapmer oligonucleotide with a
CC phosphorothioate backbone that is targeted to human TGF-beta receptor II.
XX
SQ Sequence 20 BP; 3 A; 6 C; 4 G; 7 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1208 AGCGATTCCTGAGACGCC 1227
Db ||| ||||| |||||
20 AGAAGATTCCTGAGACGCC 1

RESULT 1386
ADC66334
ID ADC66334 standard; DNA; 20 BP.
XX
AC ADC66334;
XX
DT 18-DEC-2003 (first entry)
XX
DE Human collapsin response mediator protein 2 gene antisense oligo #138002.
XX
KW neuroprotective; nootropic; neuroleptic; gene therapy;
KW human collapsin response mediator protein 2; neurodegenerative disease;
KW Alzheimer's disease; Down syndrome; schizophrenia; H-ras; ss; antisense.
XX
OS Synthetic.
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT misc_difference 1..20 /*tag= b
FT /*note= "contains phosphorothioate internucleotide
FT linkages, all cytidine nucleotides are 5-methylcytidine
FT residues"
FT misc_difference 1..5 /*tag= a
FT /*note= "2'-O-methoxyethyl modified nucleotides"
FT misc_difference 16..20 /*tag= c
FT /*note= "2'-O-methoxyethyl modified nucleotides"
FT

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XX  WO2003040320-A2.
XX  15-MAY-2003.
XX  04-NOV-2002; 2002WO-US035323.
XX  08-NOV-2001; 2001US-00006911.
XX  (ISIS-) ISIS PHARM INC.
XX  Gaarde WA, Watt AT;
XX  WPI; 2003-449447/42.
XX  New compound, having a sequence targeted to a nucleic acid encoding human
XX  protein 2 which specifically hybridizes with the nucleic acid encoding
XX  human collapsin response mediator protein 2 and inhibits its expression.
XX  The compound is useful for preparing a composition for treating
XX  neurodegenerative disease, e.g., Alzheimer's disease, Down syndrome or
XX  schizophrenia. This sequence represents the human collapsin response
XX  mediator protein 2 gene intron 1 sequence against which the antisense
XX  oligonucleotides may be targeted.
XX  Sequence 20 BP; 6 A; 8 C; 1 G; 5 T; 0 U; 0 Other;
XX  Query Match 0.7%; Score 13.6; DB 1; Length 20;
XX  Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX  Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY  1091 TTCACATCAGTCTTCCAAT 1110
Db  1 TTCACACCAGTACCTCCAAT 20

RESULT 1387
ID  ADC42498 standard; DNA; 20 BP.
XX  AC ADC42498;
XX  DT 18-DEC-2003 (first entry)
XX  DE FANCD2 PCR primer MG742 SEQ ID NO:164.
XX  KW cancer; Fanconi Anaemia; FA; BRCA; cytostatic; microarray;
XX  KM chemosensitising; ss; PCR; primer.
XX  OS Synthetic.
XX  PN WO2003039327-A2.
XX  PD 15-MAY-2003.
XX  PF 06-JUN-2002; 2002WO-US018153.
XX  PR 02-NOV-2001; 2001US-00998027.
XX  PR 02-NOV-2001; 2001WO-US045561.
XX  PA (DAND ) DANA FARBER CANCER INST.
XX  PA (UYOR-) UNIV OREGON HEALTH SCI.
XX  D'andrea AD, Taniguchi T, Timmers C, Grompe M, Fox EA;
XX  WPI; 2003-441436/41.

PT  Diagnosing or determining cancer or increased risk of cancer in a
PT  patient, by testing Fanconi Anemia/BRCA pathway gene or protein for a
PT  cancer-associated defect, that indicates cancer or increased risk of
PT  cancer.
XX  Claim 11; SEQ ID NO 164; 160pp; English.
XX  The invention relates to a novel method of diagnosing or determining if a
XX  patient has cancer or is at increased risk of cancer, involving testing a
XX  Fanconi Anaemia (FA)/BRCA pathway gene or protein for the presence of a
XX  cancer-associated defect, where the presence of one or more cancer-
XX  associated defects is indicative of cancer or an increased risk of cancer
XX  in the patient. The method of the invention has cytostatic activity. The
XX  method is useful for determining if a patient has cancer, or is at
XX  increased risk of developing cancer, e.g. breast, ovarian or prostate
XX  cancer. A microarray of the invention is useful for determining if a
XX  patient has cancer, or is at increased risk of developing cancer, by
XX  hybridising a nucleic acid sample to the nucleic acid sequences from the
XX  array, and detecting the presence of mutations in FA/BRCA pathway genes
XX  in the nucleic acid sample from the patient, where detecting the presence
XX  of mutations is indicative of a patient who has cancer, or is at
XX  increased risk of developing cancer. A method of the invention is useful
XX  for screening a chemosensitising agent, and the agent obtained is useful
XX  for treating a patient having a cancer. The present sequence is used in
XX  the exemplification of the invention.
XX  Sequence 20 BP; 2 A; 5 C; 6 G; 7 T; 0 U; 0 Other;
XX  Query Match 0.7%; Score 13.6; DB 1; Length 20;
XX  Best Local Similarity 80.0%; Pred. No. 1.1e+03;
XX  Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY  1638 GACAGAAACCAAGGCCCGA 1657
Db  20 GACAGTCCACCAAGGCACTGA 1

RESULT 1388
ID  ADC68505 standard; DNA; 20 BP.
XX  AC ADC68505;
XX  DT 18-DEC-2003 (first entry)
XX  DE Tannin biosynthesis gene related PCR primer SEQ ID NO:215.
XX  KW Lolium perenne; Festuca arundinacea; lignin; fructan; tannin;
XX  KM biosynthetic pathway; plant; PCR primer; ss.
XX  OS Synthetic.
XX  OS Lolium perenne.
XX  PN WO2003040306-A2.
XX  PD 15-MAY-2003.
XX  PF 07-NOV-2002; 2002WO-NZ000239.
XX  PF 07-NOV-2001; 2001US-0337703P.
XX  PA (GENE-) GENESIS RES & DEV CORP LTD.
XX  PA (WRIG-) WRIGHTSON SEEDS LTD.
XX  PI Demmer J, Forster RL, Gibson JB, Shenk MA, Norris MG, Glenn M;
XX  PI Saulsbury KM, Hall C;
XX  WPI; 2003-441544/41.
XX  New polynucleotide encoding polypeptides from Lolium perenne or Festuca
XX  arundinacea, useful for modulating the biosynthesis of lignin, fructan or
XX  tannin in a plant.

```


FT /*tag= c
 FT /mod base= OTHER
 FT /note= "2'-methoxyethyl nucleotide"

PN US2003113914-A1.

XX 19-JUN-2003.

XX 10-DEC-2001; 2001US-00006430.

XX 10-DEC-2001; 2001US-00006430.

XX (ISIS-) ISIS PHARM INC.

XX Graham MJ, Dobie K;

XX WPI; 2003-810907/76.

XX Novel compound hybridizing with nucleic acid molecule encoding CD81 and
 FT inhibiting the expression of CD81, useful for treating infections and
 FT disease associated with expression of CD81 such as inflammation disorder.

XX Claim 3; SEQ ID NO 35; 55pp; English.

XX The invention relates to a compound (antisense oligonucleotide)

CC hybridizing with the eighth nucleobase portion of an active site on a
 CC nucleic acid molecule encoding CD81 (also known as TAPA-1, a tetraspanin)
 CC and inhibiting the expression of CD81. Also included is a composition
 CC comprising the antisense oligonucleotide and a carrier or a diluent. The
 CC antisense oligonucleotide is useful for inhibiting the expression of CD81
 CC in cells or tissues. The antisense oligonucleotide is also useful for
 CC treating infections preferably viral, bacterial and parasitic and
 CC diseases such as inflammatory disorders and autoimmune disorders. The
 CC disease or condition is characterised by chemical dependency (e.g.
 CC cocaine addiction). The present sequence is a CD81 antisense
 CC oligonucleotide of the invention.

XX Sequence 20 BP; 3 A; 8 C; 4 G; 5 T; 0 U; 0 Other;

XX Query Match 0.7%; Score 13.6; DB 1; Length 20;

XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;

XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 238 GCCAATCTGAGGAGATGAC 257

Db 20 GCCAAGGCTGTGTGAAGAC 1

RESULT 1391

ADD14383

XX ID ADD14383 standard; DNA; 20 BP.

XX AC ADD14383;

XX 01-JAN-2004 (first entry)

XX Human src biomarker forward PCR primer SEQ ID NO:572.

XX predictor set; protein tyrosine kinase activity modulator;

XX protein tyrosine kinase pathway; protein tyrosine kinase; cytostatic;

XX gene therapy; drug sensitivity; genetic profile; cancer; human;

XX PCR primer; ss.

XX Synthetic.

XX Homo sapiens.

XX WO2003062395-A2.

XX 31-JUL-2003.

XX 17-JAN-2003; 2003WO-US001981.

XX 18-JAN-2002; 2002US-0350061P.

XX (BRIM) BRISTOL-MYERS SQUIBB CO.

XX Huang F, Fairchild CR, Lee FY, Shaw P;

XX WPI; 2003-636735/60.

XX New polynucleotides and polypeptides for predicting the activity of
 FT compounds that interact with protein tyrosine kinases and/or protein
 FT tyrosine kinase pathways.

XX Example 2; SEQ ID NO 572; 139pp; English.

XX The present invention describes a predictor set comprising a plurality of
 CC polynucleotides or polypeptides whose expression pattern is predictive of
 CC the response of cells to treatment with a compound that modulates protein
 CC tyrosine kinase activity or members of the protein tyrosine kinase
 CC pathway. Also described: (1) predicting whether a compound is capable of
 CC modulating the activity of cells, comprising obtaining a sample of cells,
 CC determining whether the cells express a plurality of markers, and
 CC correlating the expression of the markers to the compound's ability to
 CC modulate the activity of the cells; (2) a plurality of cell lines for
 CC identifying polynucleotides and polypeptides whose expression levels
 CC correlate with compound sensitivity or resistance of cells associated
 CC with a disease state; and (3) identifying polynucleotides and
 CC polypeptides that predict compound sensitivity or resistance of cells
 CC associated with a disease state, comprising subjecting the plurality of
 CC cell lines to one or more compounds, analysing the expression pattern of
 CC a microarray of polynucleotides or polypeptides, and selecting
 CC polynucleotides or polypeptides that predict the sensitivity or
 CC resistance of cells associated with a disease state by using the
 CC expression pattern of the microarray. The polynucleotides and
 CC polypeptides have cytostatic activities, and can be used in gene therapy.
 CC The polynucleotides and polypeptides are useful in predicting the
 CC activity of compounds that interact with protein tyrosine kinases and/or
 CC protein tyrosine kinase pathways. These may be used in determining drug
 CC sensitivity in patients to allow the development of individualized
 CC genetic profiles which aid in treating diseases and disorders (e.g.
 CC cancer) based on patient response at a molecular level. The present
 CC sequence is used in the exemplification of the present invention.

XX Sequence 20 BP; 7 A; 3 C; 9 G; 1 T; 0 U; 0 Other;

XX Query Match 0.7%; Score 13.6; DB 1; Length 20;

XX Best Local Similarity 80.0%; Pred. No. 1.1e+03;

XX Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1419 CCCAGAGGAGAGAGAGAG 1438

Db 1 CCGTGAGGAGAGAGAGAG 20

RESULT 1392

ADD20420/c

XX ID ADD20420 standard; DNA; 20 BP.

XX AC ADD20420;

XX 15-JAN-2004 (first entry)

XX Oreochromis niloticus microsatellite primer SEQ ID NO:1055.

XX single nucleotide polymorphism; SNP; fish; Salmo salar;

XX Oreochromis niloticus; Atlantic halibut; microsatellite; cod;

XX polymorphic site; seabass; salmonidae; Tilapia; rainbow trout; halibut;

XX detection; primer; ss.

XX Synthetic.

XX Oreochromis niloticus.

XX WO2003060160-A2.

XX 24-JUL-2003.

XX PF 17-JAN-2003; 2003WO-JB000112.
 XX PR 18-JAN-2002; 2002US-0349950P.
 PR 16-AUG-2002; 2002US-0404200P.
 XX (GENO-) GENOMAR ASA.
 PA PA
 XX Lie O, Slettan A, Hoyum M, Lingaas F;
 PI WPI; 2003-627388/59.
 DR
 XX Novel isolated nucleic acid molecule comprising single nucleotide
 PT polymorphism associated with fish, useful for forming PCR primers which
 PT are used for detecting single nucleotide polymorphisms in fish nucleic
 PT acids.
 XX
 PS Claim 18; SEQ ID NO 1055; 233pp; English.
 XX
 CC The present invention describes an isolated nucleic acid (I) comprising a
 CC single nucleotide polymorphism (SNP) chosen from: (i) a nucleic acid of
 CC Salmo salar SNPs, Oreochromis niloticus SNPs or Atlantic halibut SNPs;
 CC and (ii) a nucleic acid having nucleotide sequence that hybridises to
 CC (i), or its complement under highly stringent hybridisation conditions.
 CC Also described: (i) an isolated oligonucleotide (II) comprising at least
 CC 17 contiguous nucleotides of a nucleotide sequence of S. salar SNPs, O.
 CC niloticus SNPs, O. niloticus microsatellites, Atlantic halibut SNPs, cod
 CC polymorphic sites and seabass polymorphic sites, or their complement; (2)
 CC a primer pair (III) suitable for use in PCR, comprising two (II) capable
 CC of amplifying a nucleotide sequence chosen from S. salar SNPs and, O.
 CC niloticus SNPs, O. niloticus microsatellites, Atlantic halibut SNPs, cod
 CC polymorphic sites and seabass polymorphic sites; and determining (M1) the
 CC origin of fish sample comprising providing a parentage genotype database
 CC comprising a collection of candidate parent genotypes, where each of the
 CC candidate parent genotype represents a distinct origin, and comparing a
 CC sample genotype to the parentage genotype database, where a match between
 CC the sample genotype and one of the candidate parent genotype identifies
 CC to the origin of the sample. (M1) is useful for determining the origin of
 CC a fish sample such as family salmonidae, S. salar, Tilapia, O. niloticus,
 CC rainbow trout, halibut, seabass and Atlantic cod. (II) is useful for
 CC detecting nucleic acid molecule comprising SNP in a sample, which
 CC involves contacting the sample containing nucleic acids with one or more
 CC (II) derived from nucleotide sequence of S. salar SNPs and O. niloticus
 CC SNPs, and identifying nucleic acid that hybridises to (II). (II) is
 CC useful for detecting nucleic acid molecule comprising a polymorphic
 CC sequence in a sample, comprising contacting the sample containing nucleic
 CC acids with one or more (II) which is derived from O. niloticus
 CC microsatellite, O. niloticus SNPs, Atlantic halibut SNPs, cod polymorphic
 CC sites or seabass polymorphic sites, and identifying a nucleic acid that
 CC hybridises to (II). (III) is useful for detecting nucleic acid molecule
 CC comprising a microsatellite sequence in sample. The present sequence is
 CC used in the exemplification of the present invention.
 XX
 SQ Sequence 20 BP; 5 A; 4 C; 6 G; 5 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.6; DB 1; Length 20;
 Best Local Similarity 80.0%; Pred. No. 1.1e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1995 CTCCTAATTCACAGTGA 2014
 DB ||||| ||||| ||||| |||||
 20 CTCATCAATCCACAGTGA 1
 RESULT 1393
 ADD24992
 ID ADD24992 standard; DNA; 20 BP.
 XX AC ADD24992;
 XX
 DT 15-JAN-2004 (first entry)
 XX
 DE Human caspase-8 antisense oligonucleotide ISIS 107641.

XX Caspase-8; cytostatic; immunosuppressant; anti-HIV; ss;
 KW antisense gene therapy; apoptosis; hyperproliferative disorder;
 KW haematopoietic disorder; autoimmune disorder; viral infection; AIDS;
 KW neurological disorder; Alzheimer's disease; Parkinson's disease;
 KW amyotrophic lateral sclerosis; retinitis pigmentosa; blood cell disorder;
 KW cancer; human.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1..20
 FT /tag= b
 FT /mod_base= OTHER
 FT /note= "Phosphorothioate backbone and all cytidines are 5
 FT -methocytidines"
 FT modified_base 1..5
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "2'-methoxyethyl residues"
 FT modified_base 16..20
 FT /tag= c
 FT /mod_base= OTHER
 FT /note= "2'-methoxyethyl residues"
 XX US2003083296-A1.
 XX 01-MAY-2003.
 PD
 XX 12-JUL-2002; 2002US-00181177.
 PF
 XX 19-JAN-2000; 2000US-00487445.
 PR 11-JAN-2001; 2001WO-US000955.
 PR
 XX (ZHAN/) ZHANG H.
 PA (COWS/) COWSERT L M.
 PA Zhang H, Cowsert LM;
 PI WPI; 2003-810793/76.
 DR
 XX New compounds, particularly antisense oligonucleotides targeted to a
 PT nucleic acid encoding caspase 8, useful for treating a disease/condition
 PT associated with caspase 8, such as hyperproliferative or autoimmune
 PT disorders.
 XX
 PS Claim 3; SEQ ID NO 49; 59pp; English.
 CC
 CC The invention relates to a compound 8-30 nucleobases in length targeted
 CC to, and which specifically hybridises with a nucleic acid molecule
 CC encoding caspase 8 (a protein involved in apoptosis), and inhibits the
 CC expression of caspase 8, i.e. an antisense oligonucleotide. Also included
 CC are a compound 8-30 nucleobases in length that specifically hybridises
 CC with at least an 8-nucleobase portion of an active site on a nucleic acid
 CC molecule encoding caspase 8, a composition comprising the compound and a
 CC carrier or diluent, inhibiting the expression of caspase 8 in cells or
 CC tissues (by contacting the cells or tissues with the compound so that
 CC expression of caspase 8 is inhibited) and treating an animal having a
 CC disease or condition associated with caspase 8 by administering to the
 CC animal a therapeutic or prophylactic amount of the compound so that
 CC expression of caspase 8 is inhibited. The compound, composition and
 CC methods are useful for treating a disease or condition associated with
 CC caspase 8, such as hyperproliferative, haematopoietic or autoimmune
 CC disorder, viral infection such as AIDS, neurological disorders (e.g.
 CC Alzheimer's disease, Parkinson's disease, amyotrophic lateral sclerosis,
 CC retinitis pigmentosa), blood cell disorders and cancer. They are also
 CC useful in research and diagnostics for modulating the expression of
 CC interleukin 8. The present sequence is a caspase-8 targeting antisense
 CC oligonucleotide of the invention.
 XX
 SQ Sequence 20 BP; 4 A; 3 C; 5 G; 8 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.6; DB 1; Length 20;


```

XX OS Human immunodeficiency virus.
XX PN US2003054346-A1.
XX XX
XX PD 20-MAR-2003.
XX XX
XX PF 15-FEB-2001; 2001US-00784674.
XX XX
XX PR 10-FEB-1998; 98US-00021701.
XX XX
XX PA (SHAN/) SHANNON K W.
XX PA (WOLB/) WOLBER P K.
XX PA (DELE/) DELENSTARR G C.
XX PA (WEBB/) WEBB P G.
XX PA (KINC/) KINCAID R H.
XX XX
XX PI Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;
XX DR WPI; 2003-743746/70.
XX XX
XX PT Predicting potential of oligonucleotides to hybridize to target
XX PT nucleotide sequence comprises determining and evaluating for each
XX PT oligonucleotide a parameter predictive of the oligonucleotides ability to
XX PT hybridize with target.
XX XX
XX PS Example 2; SEQ ID NO 150; 423pp; English.
XX XX
XX CC The invention relates to a method of predicting the potential of
XX CC oligonucleotides to hybridise to target nucleotide sequences. The method
XX CC is useful for predicting the potential of an oligonucleotide to hybridise
XX CC to a target nucleotide sequence, e.g. RNA or DNA or a sequence that
XX CC contains chemically modified nucleotides. The method is also useful for
XX CC predicting the potential of the oligonucleotides to hybridise to a
XX CC complementary target nucleotide sequence. The method is useful to predict
XX CC efficient hybridisation oligonucleotides for each of multiple target
XX CC sequences therefore very large arrays may be constructed and tested with
XX CC minimum synthesis of oligonucleotides. The present sequence represents a
XX CC HIV PRT antisense derived probe.
XX XX
XX SQ Sequence 20 BP; 5 A; 3 C; 6 G; 6 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 651 GTCCCTTCATAGATGGAG 670
Db 1 GTCCATTTATCAGATGGAG 20

RESULT 1397
ADD81519
ID ADD81519 standard; DNA; 20 BP.
XX AC
XX AC ADD81519;
XX DT
XX DT 29-JAN-2004 (first entry)
XX DE
XX DE HIV PRT antisense derived probe #448.
XX XX
XX KW ss; oligonucleotide hybridisation potential; efficient hybridisation;
XX KW large array; minimum oligonucleotide synthesis; probe.
XX OS Human immunodeficiency virus.
XX XX
XX PN US2003054346-A1.
XX PD 20-MAR-2003.
XX XX
XX PF 15-FEB-2001; 2001US-00784674.
XX PR 10-FEB-1998; 98US-00021701.

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XX PA (SHAN/) SHANNON K W.
XX PA (WOLB/) WOLBER P K.
XX PA (DELE/) DELENSTARR G C.
XX PA (WEBB/) WEBB P G.
XX PA (KINC/) KINCAID R H.
XX XX
XX PI Shannon KW, Wolber PK, Delenstarr GC, Webb PG, Kincaid RH;
XX DR WPI; 2003-743746/70.
XX XX
XX PT Predicting potential of oligonucleotides to hybridize to target
XX PT nucleotide sequence comprises determining and evaluating for each
XX PT oligonucleotide a parameter predictive of the oligonucleotides ability to
XX PT hybridize with target.
XX XX
XX PS Example 2; SEQ ID NO 592; 423pp; English.
XX XX
XX CC The invention relates to a method of predicting the potential of
XX CC oligonucleotides to hybridise to target nucleotide sequences. The method
XX CC is useful for predicting the potential of an oligonucleotide to hybridise
XX CC to a target nucleotide sequence, e.g. RNA or DNA or a sequence that
XX CC contains chemically modified nucleotides. The method is also useful for
XX CC predicting the potential of the oligonucleotides to hybridise to a
XX CC complementary target nucleotide sequence. The method is useful to predict
XX CC efficient hybridisation oligonucleotides for each of multiple target
XX CC sequences therefore very large arrays may be constructed and tested with
XX CC minimum synthesis of oligonucleotides. The present sequence represents a
XX CC HIV PRT antisense derived probe.
XX XX
XX SQ Sequence 20 BP; 7 A; 6 C; 2 G; 5 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 1.1e+03;
Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1834 CCTATTGACATCTTAGAA 1853
Db 1 CCTATTGACATCTCCAGAA 20

RESULT 1398
ADE15807
ID ADE15807 standard; DNA; 20 BP.
XX AC
XX AC ADE15807;
XX DT
XX DT 29-JAN-2004 (first entry)
XX DE
XX DE Human PKR exon 4 PCR primer PKR4A.
XX KW ss; primer; PCR; 2',5'-oligoadenylate synthetase; OAS; RNase L;
XX KW 2'-5' phosphodiesterase; hepatitis C; virucide; hepatotropic;
XX KW gene therapy; vaccine; human.
XX OS Homo sapiens.
XX XX
XX PN WO2003089003-A1.
XX PD 30-OCT-2003.
XX XX
XX PF 15-APR-2003; 2003WO-GB001625.
XX PR 19-APR-2002; 2002GB-00008928.
XX XX
XX PA (IMCO-) IMPERIAL COLLEGE INNOVATIONS LTD.
XX PI Hill A, Thurez M, Knapp S;
XX XX
XX DR WPI; 2003-854045/79.
XX XX
XX PT Use of a compound capable of modulating the level of activity of the OAS,
XX PT RNase L or 2'-5' phosphodiesterase gene or protein in the manufacture of

```

PT a medicament for treating a patient with or at risk of hepatitis C
PT infection.
XX

PS Example 1; Page 42; 67pp; English.

XX
CC The invention relates to a novel compound capable of modulating the level
CC of activity of the 2',5'-oligoadenylate synthetase (OAS), RNase L or 2'-
CC 5' phosphodiesterase gene or protein, useful in the manufacture of a
CC medicament for treating a patient with or at risk of hepatitis C
CC infection, where the compound is not an interferon or an isoprenoid, such
CC as geranylgeranylacetone (GGA). The method of the invention has virucide
CC and hepatotropic activity. A polynucleotide of the invention may have a
CC use in gene therapy, or in a vaccine. The compound capable of modulating
CC the level of activity of the OAS, RNase L or 2'-5' phosphodiesterase gene
CC and/or activity of the OAS, RNase L or 2'-5' phosphodiesterase protein is
CC useful in the manufacture of a medicament for treating a patient with or
CC at risk of hepatitis C infection. The nucleic acid that hybridises
CC selectively to OAS nucleic acid is useful in the manufacture of a
CC medicament or diagnostic reagent for treating or diagnosing a patient
CC with or at risk of hepatitis C infection. The present sequence is used in
CC the exemplification of the invention.
XX

SQ Sequence 20 BP; 9 A; 6 C; 2 G; 3 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 20;

Best Local Similarity 80.0%; Pred. No. 1.1e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 210 AAAAATGGAAATCTATCGCC 229

|||||
Db 1 AAAAATGGCAATCACTCACC 20

RESULT 1399

ADD44398/C

ID ADD44398 standard; DNA; 21 BP.

AC ADD44398;

XX 15-JAN-2004 (first entry)

XX Human SHP-1 5' PCR primer.

XX erythropoietin receptor; EPOR; tyrosine phosphatase; Src homology 2; SH2;
XX tyrosine phosphatase; SHP1; neuroprotective; cerebroprotective;
XX hypertensive; vasotropic; cardiac; antiinflammatory; neurotropic;
XX antiparkinsonian; antiemetic; cyostatic; anti-HIV; antialcoholic;
XX tranquiliser; vulnery; ophthalmological; neuroprotection;
XX acute nervous system disease; PCR; primer; ss.
XX

OS Homo sapiens.

PN WO2003078959-A2.

XX 25-SEP-2003.

XX 11-MAR-2003; 2003WO-US007200.

XX 11-MAR-2002; 2002US-0363440P.

XX (ORTH) ORTHO-MCNEIL PHARM INC.

XX Renzi M, Thirumalai N, Jolliffe L, Farrell FX;

XX WPI; 2003-812477/76.

XX Use of a composition that decreases the tyrosine phosphatase activity of
PT a Src homology 2 containing protein tyrosine phosphatase (SHP1) in a cell
PT of the nerve system for treating a condition related to erythropoietin
PT receptor.
XX

PS Example 3; SEQ ID NO 6; 64pp; English.

CC The invention relates to a novel method for treating a nervous system
CC condition related to erythropoietin receptor (EPOR). The novel method
CC comprises administering a composition that decreases the tyrosine
CC phosphatase activity of an Src homology 2 (SH2) containing protein
CC tyrosine phosphatase (SHP1) or decreases expression of SHP1 in a cell of
CC the nerve system, or comprises inhibitor(s) of a SHP1 tyrosine
CC phosphatase protein. The method of the invention has the following
CC activities: neuroprotective, cerebroprotective, hypertensive, vasotropic,
CC cardiac, antiinflammatory, neurotropic, antiparkinsonian, antiemetic,
CC cyostatic, anti-HIV, antialcoholic, tranquiliser, vulnery, and
CC ophthalmological. The method of the invention is used for treating a
CC subject in need of neuroprotection, where the condition is an acute
CC nervous system disease, e.g. ischaemic stroke, haemorrhagic stroke,
CC spinal cord injury and traumatic brain injury or chronic nervous system
CC disease selected from Alzheimer's disease, Parkinson's disease,
CC peripheral neuropathies, and cognitive impairment associated with
CC coronary artery bypass graft surgery (CABG) and carotid endarterectomy
CC (CEA), where the condition is a result of a seizure disorder, multiple
CC sclerosis, stroke, hypotension, ischaemia, myocardial infarction,
CC inflammation, ageing or cognitive dysfunction, radiation damage, cerebral
CC palsy, neurodegenerative disease, Alzheimer's disease, Parkinson's
CC disease, Leigh disease, AIDS dementia, memory loss, amyotrophic lateral
CC sclerosis, alcoholism, mood disorder, anxiety disorder, attention deficit
CC disorder, autism, Creutzfeld-Jakob disease, brain or spinal cord trauma,
CC heart-lung bypass, glaucoma, retinal ischaemia and retinal trauma. This
CC polynucleotide sequence represents one of the primers used in the method
CC of the invention.
XX

SQ Sequence 21 BP; 6 A; 7 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 0.7%; Score 13.6; DB 1; Length 21;

Best Local Similarity 80.0%; Pred. No. 1.2e+03;

Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1674 CTGGGTGAGCTCTCCAGGA 1693

|||||
Db 21 CTGGTTGATCTGGTCCAGGA 2

RESULT 1400

ABV75434

ID ABV75434 standard; DNA; 24 BP.

XX AC ABV75434;

XX 24-JAN-2003 (first entry)

XX Human carbamylaspartic dehydrase 9.46 related primer 1.

XX Human; carbamylaspartic dehydrase; 9.46; malignant tumour; haemopathy;
XX human immunodeficiency virus; HIV; immunological disease; inflammation;
XX PCR; primer; ss.
XX

OS Homo sapiens.

PN CN1352303-A.

XX 05-JUN-2002.

XX 06-NOV-2000; 2000CN-00127204.

XX 06-NOV-2000; 2000CN-00127204.

XX (BODE-) BODE GENE DEV CO LTD SHANGHAI.

XX Mao Y, Xie Y;

XX WPI; 2002-644475/70.

XX New polypeptide-human carbamylaspartic dehydrase 9.46 and polynucleotide
PT encoding the polypeptide.
XX

PS Example 2; Page 16 (disclosure); 32pp; Chinese.

XX The invention relates to a new polypeptide, human carbamylaspartic
 CC dehydrase, designated 9.46, polynucleotides encoding the polypeptide and
 CC the DNA recombination process to produce the polypeptide. The present
 CC invention also discloses the method of applying the polypeptide in
 CC treating various diseases, such as malignant tumours, haemopathy, Human
 CC Immunodeficiency Virus (HIV) infection, immunological diseases and
 CC various inflammations. Also disclosed is the antagonist resisting the
 CC polypeptide and its treatment effect, and the application of the
 CC polynucleotides for encoding human carbamylaspartic dehydrase 9.46. The
 CC current sequence represents a human carbamylaspartic dehydrase 9.46
 CC related PCR primer sequence
 XX
 SQ Sequence 24 BP; 11 A; 1 C; 12 G; 0 T; 0 U; 0 Other;
 Query Match 0.7%; Score 13.6; DB 1; Length 24;
 Best Local Similarity 80.0%; Pred. No. 1.4e+03;
 Matches 16; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 XX
 QY 1401 GGATGAAAGAGAGAGACC 1420
 ||| || ||||| |||
 Db 1 GGAGGAGAGAGAGAGAGC 20
 RESULT 1401
 AAQ36717
 ID AAQ36717 standard; DNA; 15 BP.
 XX
 AC AAQ36717;
 XX
 DT 25-MAR-2003 (revised)
 DT 08-JUN-1993 (first entry)
 XX
 DE HLA DR type probe.
 XX
 KW Associated subtypes; human leukocyte antigen; typing; diagnosis;
 KW forensic medicine; matching; transplant; donors; recipients; rapid;
 KW DRB-1; DRB-3; DRB-5; point mutations; probe set; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT misc_feature 1..13
 FT /*tag= a
 FT /note= "optimum sequence"
 XX
 PN WO9302213-A1.
 XX
 PD 04-FEB-1993.
 XX
 PF 17-JUL-1992; 92WO-FR000702.
 XX
 PR 17-JUL-1991; 91FR-00009058.
 XX
 PA (INMR) BIO MERIEUX.
 XX
 PI Allibert PA, Gros P, Mach BF, Mandrand BF, Tiercy J-M;
 XX
 DR WPI; 1993-058806/07.
 XX
 PT New nucleotide probes, pref. coupled to a ligand - useful for determining
 PT HLA-DR and/or related types in tissue grafting, paternity determinations
 PT etc.
 XX
 PS Claim 1; Page 38; 48pp; French.
 XX
 CC The probe is part of a set of probes used for detecting human leukocyte
 CC antigen (HLA) DR types. They can be used for HLA typing in matching
 CC transplant donors and recipients, diagnosis, forensic medicine, etc. They
 CC can be reacted at a single temp. (pref. 37 deg.C), can detect point
 CC mutations, provide specific and sensitive analyses, and are easy to
 CC use/automate. They can detect all alleles of DRB-1, DRB-3 and DRB-5 loci
 CC and also alleles of other highly polymorphic loci (DQB1 or DPB1). Typing

CC is rapid (less than 12 hr.) and less expensive than serotyping. (Updated
 CC on 25-MAR-2003 to correct PN field.) (Updated on 25-MAR-2003 to correct
 CC PI field.)
 XX
 SQ Sequence 15 BP; 4 A; 0 C; 7 G; 4 T; 0 U; 0 Other;
 Query Match 0.6%; Score 13.4; DB 1; Length 15;
 Best Local Similarity 93.3%; Pred. No. 7.7e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 XX
 QY 1491 GGAGGAGGTCAAGTT 1505
 ||||| |||||
 Db 1 GGAGGAGGTCAAGTT 15
 RESULT 1402
 AAT62242
 ID AAT62242 standard; DNA; 15 BP.
 XX
 AC AAT62242;
 XX
 DT 21-OCT-1997 (first entry)
 XX
 DE HLA DR typing probe #111.
 XX
 KW Probe; human lymphocyte antigen; HLA; tissue typing; transplantation;
 KW hybridisation; allele; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT misc_feature 1..13
 FT /*tag= a
 FT /note= "minimal sequence required for probe; sequence of
 claim 4"
 XX
 PN WO9640989-A1.
 XX
 PD 19-DEC-1996.
 XX
 PF 03-JUN-1996; 96WO-FR000836.
 XX
 PR 07-JUN-1995; 95US-00485133.
 XX
 PA (INMR) BIO MERIEUX.
 XX
 PI Allibert PA, Gros P, Mach BF, Mandrand BF, Tiercy J;
 XX
 DR WPI; 1997-052362/05.
 XX
 PT Oligo:nucleotide probes specific for human leukocyte antigen DR allele(s)
 PT - useful for hybridisation assays for HLA DR typing of e.g. tissue for
 PT transplantation.
 XX
 PS Claim 3; Page 39; 50pp; French.
 XX
 CC The probes AAT62232-T62306 are used for HLA DR typing individuals, e.g.
 CC for transplantation of tissues, by standard hybridisation assays. The
 CC probes may be linked to a ligand and immobilised for ease of detection.
 CC Hybridisation using the probes allows identification of all DRB alleles
 CC in a rapid manner which is suitable for tissue typing
 XX
 SQ Sequence 15 BP; 4 A; 0 C; 7 G; 4 T; 0 U; 0 Other;
 Query Match 0.6%; Score 13.4; DB 1; Length 15;
 Best Local Similarity 93.3%; Pred. No. 7.7e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 XX
 QY 1491 GGAGGAGGTCAAGTT 1505
 ||||| |||||
 Db 1 GGAGGAGGTCAAGTT 15

RESULT 1403
AAF28328
ID AAF28828 standard; DNA; 15 BP.
XX
AC AAF28828;
XX
DT 25-APR-2001 (first entry)
XX
DE Human DRB1*10 allele probe 10.
XX
XX Genetic predisposition; polymorphic region; amplicon; probe; allele;
KW disease susceptibility; disease resistance; hybridisation; DRB1;
KW rheumatoid polyarthritis; ankylosing spondylitis; Sjogren's syndrome;
KW disseminated lupus erythematosus; connective tissue disease; ss.
XX
OS Homo sapiens.
XX
PN FR2793809-A1.
XX
XX 24-NOV-2000.
PD
XX 06-DEC-1999; 99FR-00015314.
XX
XX 20-MAY-1999; 99FR-00006599.
PR
XX (INMR) BIOMERIEUX SA.
PA
XX Mouglin B, Tiercy JM;
PI
XX WPI; 2001-042649/06.
DR
XX
XX Analyzing genetic predisposition to disease, e.g. rheumatoid
PT polyarthritis, by amplification then hybridization to low- and high-
PT resolution oligonucleotide probes.
XX
PS Claim 9; Page 13; 61pp; French.
XX
XX The invention relates to a method of analyzing genetic predisposition to
CC at least one disease, by treating a liquid sample, containing at least
CC one type of amplicon derived from at least one polymorphic region (PMR)
CC related to the disease, with at least one type-specific probe (P1; low
CC resolution) and at least one subtype-specific probe (P2; high
CC resolution). P1 hybridizes to at least one gene, or a group of alleles of
CC the gene, present in the amplicon and P2 hybridizes to the allele, or
CC group of alleles, specific to P1. P2 can discriminate between one or more
CC alleles associated with susceptibility and/or those alleles associated
CC with resistance to disease, according to whether they hybridize or not.
CC This sequence is an example of a P1 sequence and is specific for the HLA
CC DRB1*10 alleles. The method is specifically used to detect the HLA
CC alleles associated with susceptibility, or resistance, to rheumatoid
CC polyarthritis, ankylosing spondylitis, disseminated lupus erythematosus,
CC connective tissue disease and Sjogren's syndrome
XX
SQ Sequence 15 BP; 4 A; 0 C; 7 G; 4 T; 0 U; 0 Other;
Query Match 0.6%; Score 13.4; DB 1; Length 15;
Best Local Similarity 93.3%; Pred. No. 7.7e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1491 GGAGGAGGTCAGTT 1505
DB 1 GGAGGAGGTCAGTT 15
RESULT 1404
AAF48241/c
ID AAF48241 standard; DNA; 15 BP.
XX
AC AAF48241;
XX
XX 30-MAR-2001 (first entry)
DT
XX IGFBP3 oligonucleotide #1661.
DE

XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW skin disorder; insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW hyperneovascular condition; hyperplasia; kidney disease;
KW neovascular condition of the retina; ss.
XX
OS Homo sapiens.
XX
PN WO200078341-A1.
XX
XX 28-DEC-2000.
PD
XX 21-JUN-2000; 2000WO-AU000693.
XX
XX 21-JUN-1999; 99US-0140345P.
PR
XX (MURD-) MURDOCH CHILDRENS RES INST.
PA
XX Wraight CJ, Werther GA, Edmondson SR;
PI
XX WPI; 2001-041421/05.
DR
XX Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT UV (ultra-violet) treatment (optional) and an antisense nucleic acid that
PT inhibits or reduces growth factor mediated cell proliferation and/or
PT inflammation.
XX
XX Example 7; Page 55; 201pp; English.
XX
XX The present invention relates to a method for ameliorating the effects of
CC skin disorders. The method comprises contacting the skin with an
CC antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisense
CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC F45161). The method is useful for ameliorating the effects of psoriasis,
CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC hyperneovascular condition such as a neovascular condition of the retina,
CC brain or skin, growth factor-mediated malignancies, other sclerotic
CC disease, kidney disease, hyperproliferation of the inside of blood
CC vessels or any other hyperplasia
XX
SQ Sequence 15 BP; 2 A; 7 C; 2 G; 4 T; 0 U; 0 Other;
Query Match 0.6%; Score 13.4; DB 1; Length 15;
Best Local Similarity 93.3%; Pred. No. 7.7e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1329 TTCTGAAGAGGAGGG 1343
DB 15 TTCTGAAGAGGAGGG 1
RESULT 1405
AAF49639
ID AAF49639 standard; DNA; 15 BP.
XX
AC AAF49639;
XX
XX 30-MAR-2001 (first entry)
DT
XX IGF-I oligonucleotide #599.
DE
XX Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW


```

PA (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI Wraight CJ, Werther GA, Edmondson SR;
XX
DR WPI; 2001-041421/05.
XX
PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT UV (ultra-violet) treatment (optional) and an antisenese nucleic acid that
PT inhibits or reduces growth factor mediated cell proliferation and/or
PT inflammation.
XX
PS Example 8; Page 87; 201pp; English.
XX
CC The present invention relates to a method for ameliorating the effects of
CC skin disorders. The method comprises contacting the skin with an
CC antisenese oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisenese
CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC F45161). The method is useful for ameliorating the effects of psoriasis,
CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC hyperneovascular condition such as a neovascular condition of the retina,
CC brain or skin, growth factor-mediated malignancies, other sclerotic
CC disease, kidney disease, hyperproliferation of the inside of blood
CC vessels or any other hyperplasia
XX
SQ Sequence 15 BP; 4 A; 4 C; 7 G; 0 T; 0 U; 0 Other;
Query Match 0.6%; Score 13.4; DB 1; Length 15;
Best Local Similarity 93.3%; Pred. No. 7.7e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1346 AGGGGGGCGCAAGA 1360
DB 1 ACGGGGGCGCAAGA 15

RESULT 1410
AAF49638
ID AAF49638 standard; DNA; 15 BP.
XX
AC AAF49638;
XX
DT 30-MAR-2001 (first entry)
XX
DE IGF-I oligonucleotide #598.
XX
KW Antisenese therapy; antiproliferative; antiinflammatory; antipsoriatic;
KW cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid;
KW skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis;
KW IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris;
KW growth factor mediated cell proliferation; ichthyosis; serborrhea; ruba;
KW keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease;
KW hyperneovascular condition; hyperplasia; kidney disease;
KW neovascular condition of the retina; ss.
XX
OS Homo sapiens.
XX
FN WO200078341-A1.
XX
PD 28-DEC-2000.
XX
PF 21-JUN-2000; 2000WO-AU000693.
XX
PR 21-JUN-1999; 99US-0140345P.
XX
PA (MURD-) MURDOCH CHILDRENS RES INST.
XX
PI Wraight CJ, Werther GA, Edmondson SR;
XX

```

```

DR WPI; 2001-041421/05.
XX
PT Ameliorating the effects of a disorder, e.g. psoriasis, by administering
PT UV (ultra-violet) treatment (optional) and an antisenese nucleic acid that
PT inhibits or reduces growth factor mediated cell proliferation and/or
PT inflammation.
XX
PS Example 8; Page 64; 201pp; English.
XX
CC The present invention relates to a method for ameliorating the effects of
CC skin disorders. The method comprises contacting the skin with an
CC antisenese oligonucleotide, (for Insulin-like Growth Factor [IGF]-1
CC receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of
CC inhibiting or reducing growth factor mediated cell proliferation,
CC inflammation and/or other disorders. The present sequence is an
CC oligonucleotide which can be used to design the antisenese
CC oligonucleotides of the present invention (see AAF45151 and AAF45153-
CC F45161). The method is useful for ameliorating the effects of psoriasis,
CC ichthyosis, pityriasis, ruba, pilaris, serborrhea, keloids, keratosis,
CC neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
CC hyperneovascular condition such as a neovascular condition of the retina,
CC brain or skin, growth factor-mediated malignancies, other sclerotic
CC disease, kidney disease, hyperproliferation of the inside of blood
CC vessels or any other hyperplasia
XX
SQ Sequence 15 BP; 6 A; 2 C; 6 G; 1 T; 0 U; 0 Other;
Query Match 0.6%; Score 13.4; DB 1; Length 15;
Best Local Similarity 93.3%; Pred. No. 7.7e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1456 ACCAAGGAGGAGAAG 1470
DB 1 ACCATGGAGGAGAAG 15

RESULT 1411
AAF84733
ID AAF84733 standard; DNA; 15 BP.
XX
AC AAF84733;
XX
DT 29-JUN-2001 (first entry)
XX
DE Probe used to identify human leucocyte antigen (HLA) alleles.
XX
KW Binding reaction; photothermic detection; nucleic acid hybridization;
KW human leucocyte antigen; HLA; probe; ss.
XX
OS Homo sapiens.
XX
FN WO200123867-A1.
XX
PD 05-APR-2001.
XX
PF 29-SEP-2000; 2000WO-FR002703.
XX
PR 30-SEP-1999; 99FR-00012229.
XX
PA (COMS ) COMMISSARIAT ENERGIE ATOMIQUE.
PA (INMR ) BIOMERIEUX SA.
XX
PI Chaton P, Poupinet L, Ginot F, Novelli Rousseau A;
XX
WPI; 2001-266207/27.
XX
PT Detecting specific binding reaction without labeling, useful particularly
PT for nucleic acid hybridization, comprises photothermic detection.
XX
PS Example 4; Page 34; 65pp; French.
XX
CC The specification describes a method and device for detecting a binding
CC reaction between a molecule fixed to a support and a molecule in test

```

CC solution comprises photothermic detection, without use of a label. The
 CC method is used to detect nucleic acid hybridization, e.g. for diagnosis
 CC and screening, but can also be applied to antigen/antibody,
 CC enzyme/substrate etc. interactions. AAF84719-26 and AAF84729-35 represent
 CC probes used in the method of the invention to identify different human
 CC leucocyte antigen (HLA) alleles. AAF84719 represents a positive control,
 CC and AAF84720 represents a negative control. The rest of the probes
 CC identify alleles of the group DRB1*04
 XX
 SQ Sequence 15 BP; 4 A; 0 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 15;
 Best Local Similarity 93.3%; Pred. No. 7.7e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1491 GGAGGAGGTCACAGTT 1505
 DB 1 GGAGGAGGTTAAGTT 15

RESULT 1412
 AAF28859
 ID AAF28859 standard; DNA; 15 BP.

AC AAF28859;

XX 25-APR-2001 (first entry)

DE Human DRB1*10 allele probe 10.

XX Genetic predisposition; polymorphic region; amplicon; probe; allele;
 KW disease susceptibility; disease resistance; hybridisation; DRB1;
 KW rheumatoid polyarthritis; ankylosing spondylitis; Sjogren's syndrome;
 KW disseminated lupus erythematosus; connective tissue disease; ss.

XX Homo sapiens.

XX FR2793808-A1.

XX 24-NOV-2000.

XX 20-MAY-1999; 99FR-00006599.

XX 20-MAY-1999; 99FR-00006599.

XX (INMR) BIO MERIEUX.

XX Mouglin B, Tiercy JM;

XX WPI; 2001-052292/07.

XX Determining genetic predisposition to disease, e.g. rheumatoid
 XX polyarthritis, by reacting amplicons of polymorphic human leukocyte
 XX antigen (HLA) region with both high and low resolution probes.

XX Claim 9; Page 12; 51pp; French.

XX The invention relates to a method of analyzing genetic predisposition to
 XX at least one disease, by treating a liquid sample, containing at least
 XX one type of amplicon derived from at least one polymorphic region (PMR)
 XX related to the disease, with at least one type-specific probe (P1; low
 XX resolution), and at least one subtype-specific probe (P2; high
 XX resolution). P1 hybridizes to at least one gene, or a group of alleles of
 XX the gene, present in the amplicon and P2 hybridizes to the allele, or
 XX group of alleles, specific to P1. P2 can discriminate between one or more
 XX alleles associated with susceptibility and/or those alleles associated
 XX with resistance to disease, according to whether they hybridize or not.
 XX This sequence is an example of a P1 sequence and is specific for the HLA
 XX DRB1*10 alleles. The method is specifically used to detect the HLA
 XX alleles associated with susceptibility, or resistance, to rheumatoid
 XX polyarthritis, ankylosing spondylitis, disseminated lupus erythematosus,
 XX connective tissue disease and Sjogren's syndrome

SQ Sequence 15 BP; 4 A; 0 C; 7 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 15;
 Best Local Similarity 93.3%; Pred. No. 7.7e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1491 GGAGGAGGTCACAGTT 1505
 DB 1 GGAGGAGGTTAAGTT 15

RESULT 1413
 ABS64890/C
 ID ABS64890 standard; DNA; 15 BP.

XX ABS64890;

XX 15-NOV-2002 (first entry)

DE ASO primer, #7, for detecting CYP27B1 gene polymorphisms.

XX Human; primer; ss; cytochrome P450; subfamily XXVIIIB;
 KW 25-hydroxyvitamin D-1-alpha-hydroxylase; CYP27B1; isogene; hydroxylation;
 KW 25-hydroxyvitamin D3; 25(OH)D3; calcitriol; lalpa,25(OH)2D3; kidney;
 KW nuclear receptor; vitamin D; VDR; calcium homeostasis;
 KW cellular differentiation; SNP; single nucleotide polymorphism;
 KW pseudovitamin D-dependent rickets type 1; haplotyping; genotyping;
 KW antibody; antisense; cancer; diabetes; inflammatory disorder;
 KW chromosome 12q13.3-q14; antiinflammatory; ASO;
 KW allele specific oligonucleotide.

XX Homo sapiens.

XX WO200262820-A2.

XX 15-AUG-2002.

XX 05-NOV-2001; 2001WO-US047438.

XX 03-NOV-2000; 2000US-0245797P.

XX (GENA-) GENAISSANCE PHARM INC.

XX Bieglecki KM, Monroe G, Kazemi A, Shah N;

XX WPI; 2002-643397/69.

XX New genetic variants of the human polypeptide 1 (CYP27B1) gene, useful
 XX for treating disorders associated with aberrant expression or
 XX overproduction of TNF e.g. cancer, diabetes or inflammatory disorders.

XX Claim 14; Page 14; 64pp; English.

XX The invention discloses an isolated polymorphic polynucleotide comprising
 XX a coding sequence for a cytochrome P450, subfamily XXVIIIB (25-
 XX hydroxyvitamin D-1-alpha-hydroxylase) or CYP27B1 isogene. CYP27B1
 XX catalyses the hydroxylation of 25-hydroxyvitamin D3 [25(OH)D3] to
 XX calcitriol (1alpha,25(OH)2D3) in the proximal tubule of the kidney. The
 XX binding of calcitriol to the nuclear receptor for the hormonally active
 XX form of vitamin D (VDR) activates the receptor with subsequent regulation
 XX of physiological events such as calcium homeostasis and cellular
 XX differentiation. The various polymorphisms in the CYP27B1 gene may cause
 XX pseudovitamin D-dependent rickets type I. The polynucleotide is useful
 XX for haplotyping, genotyping, predicting a haplotype pair, identifying an
 XX association between a trait and at least one haplotype or haplotype pair
 XX and for designing an isolated nucleotide for detecting a polymorphism in
 XX the CYP27B1 gene. The polypeptide is useful for raising antibodies
 XX specific for, and immunoreactive with, the isolated polypeptide and for
 XX screening for drugs or other chemical compounds that bind to, or are
 XX enzymatic substrates for, the isolated polypeptide. The pharmaceutical
 XX composition, comprising the isolated polynucleotide, an antisense
 XX oligonucleotide directed against one of the novel CYP27B1 isogenes, a
 XX polynucleotide encoding the antisense oligonucleotide or another compound

CC that inhibits expression of the CYP27B1 isogene, is useful for treating
 CC disorders affected by expression or function of the CYP27B1 isogene e.g.
 CC cancer, diabetes or inflammatory disorders. The sequences presented in
 CC A8564884-A8564897 are the allele specific oligonucleotide (ASO) primers
 CC which were used for detecting CYP27B1 gene polymorphisms. The CYP27B1
 CC gene is located on chromosome 12q13.3-q14
 XX
 SQ Sequence 15 BP; 2 A; 6 C; 4 G; 2 T; 0 U; 1 Other;
 Query Match 0.6%; Score 13.4; DB 1; Length 15;
 Best Local Similarity 93.3%; Pred. No. 7.7e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1656 GAGCTCAGGCGCAGCT 1670
 Db 15 GSGCTCAGGCGCAGCT 1
 RESULT 1414
 ABK81387
 ID ABK81387 standard; DNA; 15 BP.
 XX
 AC ABK81387;
 XX
 DT 13-AUG-2002 (first entry)
 XX
 DE SCYA21 gene allele specific oligonucleotide primer #1.
 XX
 DE Small inducible cytokine subfamily A (Cys-Cys) member 21; SCYA21;
 KW polymorphism; haplotype; immunological disorder; gene expression;
 KW drug development; immunomodulator; allele specific oligonucleotide;
 KW primer; ss.
 XX
 OS Homo sapiens.
 XX
 FN WO200232930-A2.
 XX
 PD 25-APR-2002.
 XX
 PF 09-OCT-2001; 2001WO-US046141.
 XX
 PR 19-OCT-2000; 2000US-0241622P.
 XX
 PA (GENA-) GENAISSANCE PHARM INC.
 XX
 PI Bentivegna SC, Russo DP;
 XX
 DR WPI; 2002-435528/46.
 XX
 PT New genetic variants comprising haplotypes of the small inducible
 PT cytokine subfamily A, member 21 (SCYA21) gene, useful in improving the
 PT efficiency of screening for drugs for treating immunological disorders or
 PT for targeting SCYA21.
 XX
 PS Claim 14; Page 13; 56pp; English.
 XX
 CC The invention describes an isolated polynucleotide, which comprises genes
 CC and haplotypes of the small inducible cytokine subfamily A (Cys-Cys),
 CC member 21 (SCYA21) gene. The polynucleotide comprises polymorphic sites
 CC referred to as P51-5 to designate the order in which they are located in
 CC the gene. The polymorphisms and haplotypes of SCYA21 gene are useful for
 CC validating whether SCYA21 is a suitable target for drugs to treat
 CC immunological disorders and disorders associated with its abnormal
 CC expression or function, screening for such drugs and reducing bias in
 CC clinical trials of such drugs. Haplotype information would be useful in
 CC improving the efficiency and output of several steps in the drug
 CC discovery and development process, including target validation,
 CC identifying lead compounds and early phase clinical trials. The methods
 CC are useful in screening for compounds targeting SCYA21 to treat a
 CC specific condition or disease predicted to be associated with SCYA21
 CC activity, e.g. immunological disorders. This sequence represents an
 CC allele specific oligonucleotide primer used to identify polymorphic sites
 CC in the SCYA21 gene

XX
 SQ Sequence 15 BP; 3 A; 3 C; 4 G; 4 T; 0 U; 1 Other;
 Query Match 0.6%; Score 13.4; DB 1; Length 15;
 Best Local Similarity 93.3%; Pred. No. 7.7e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 354 TGAGGACTGTCCAGT 368
 Db 1 TGAGGACTGTCCAYT 15
 RESULT 1415
 AAQ96309/c
 ID AAQ96309 standard; DNA; 16 BP.
 XX
 AC AAQ96309;
 XX
 DT 28-FEB-1996 (first entry)
 XX
 DE p53 gene hybridisation probe.
 XX
 KW p53 gene; hybridisation probe; detection; tumour; cancer;
 KW chemoprevention; chemotherapy; ss.
 XX
 OS Synthetic.
 XX
 PN WO9519448-A1.
 XX
 PD 20-JUL-1995.
 XX
 PF 13-JAN-1995; 95WO-US000657.
 XX
 PR 14-JAN-1994; 94US-00181664.
 XX
 PA (UYJO) UNIV JOHNS HOPKINS SCHOOL MED.
 XX
 PI Sidransky D;
 XX
 DR WPI; 1995-263876/34.
 XX
 PT Detection of a target neoplastic nucleic acid and treatment of tumours -
 PT provides a rapid and accurate detection of mutant sequences.
 XX
 PS Example 1; Page 37; 126pp; English.
 XX
 CC AAQ96305-Q96363 are p53 gene hybridisation probes, used in the
 CC development of a new method for the detection of mutant nucleotide
 CC sequences associated with primary tumours. The method may be used to
 CC screen high risk populations, and to monitor patients undergoing
 CC chemoprevention or chemotherapy
 XX
 SQ Sequence 16 BP; 1 A; 7 C; 5 G; 3 T; 0 U; 0 Other;
 Query Match 0.6%; Score 13.4; DB 1; Length 16;
 Best Local Similarity 93.3%; Pred. No. 8.5e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 64 ATGGCGCAGACGCGAG 78
 Db 15 ATGGCGCAGACGCGG 1
 RESULT 1416
 AAQ21838/c
 ID AAQ21838 standard; DNA; 17 BP.
 XX
 AC AAQ21838;
 XX
 DT 25-JUN-1992 (first entry)
 XX
 DE Antisense polyamine-conjugated oligonucleotide to papilloma virus.

KW Initiation of translation sequence; antisense therapy; phosphorothioate;
 KW nuclelease resistance; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1 /*tag= a
 FT /mod_base= OTHER
 FT /note= "5'-deoxy-5'-(diphenylimidazolin-2-yl) thymidine"
 XX
 XX
 PN WO9202531-A.
 XX
 XX 20-FEB-1992.
 PD
 XX
 XX 27-JUL-1990; 90US-00558663.
 PF
 XX
 XX 27-JUL-1990; 90US-00558663.
 PR
 XX (ISIS-) ISIS PHARMA INC.
 XX
 XX Cook PD, Guinasso CJ;
 PI
 XX
 XX WPI; 1992-080013/10.
 DR
 XX
 XX New poly-amine conjugated oligo-nucleotide analogues - target TAT region
 PT of HIV and portions of Herpes and papilloma genome(s).
 FT
 XX
 XX Example 3; Page 17; 26pp; English.
 PS
 XX
 XX A phosphorothioate oligonucleotide able to hybridise to Papilloma virus
 CC initiation of translation sequence was synthesised. The 5' thymidine
 CC derivative was conjugated with a polyamine, pref. tris(aminoethyl)amine.
 CC The resulting oligonucleotide analogue has enhanced cellular uptake and
 CC is less susceptible to nuclease activity than standard oligonucleotides.
 CC It can be used in anti-sense therapy. See AAQ21836-Q21842
 XX
 XX Sequence 17 BP; 2 A; 8 C; 0 G; 7 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 9.3e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1332 TGAAGAGGAGGAGA 1346
 DB 15 TGAAGAGGAGTGGAGA 1
 RESULT 1417
 AAQ36912
 ID AAQ36912 standard; DNA; 17 BP.
 XX
 AC AAQ36912;
 XX
 XX 25-MAR-2003 (revised)
 DT 18-JUN-1993 (first entry)
 XX
 XX Human progesterone receptor mRNA antisense oligonucleotide.
 DE hPR; antisense; inhibition; synthesis; translation; anticancer agent;
 XX cancer; pregnancy termination; abortion; detection; ss.
 KW
 XX
 XX Synthetic.
 OS
 XX WO9303053-A1.
 PN
 XX 18-FEB-1993.
 PD
 XX
 XX 29-JUL-1992; 92WO-EP001745.
 PF
 XX
 XX 30-JUL-1991; 91IT-MI002117.
 PR
 XX (UWMI-) UNIV MILAN STUDI.
 PA

PA (HOFF) PROD ROCHE SPA.
 XX
 PI Maggi A, Nicolin A;
 XX
 XX WPI; 1993-076434/09.
 DR
 XX
 XX Anti-sense oligo-nucleotide blocks synthesis of human progesterone
 PT receptor - useful for termination of pregnancy, as anticancer agents and
 FT for detection of human progesterone receptor-mRNA.
 FT
 XX
 XX Claim 7; Page 9; 16pp; English.
 PS
 XX
 XX The sequence is that of an antisense oligonucleotide which can hybridise
 CC under stringent conditions to a part of the mRNA sequence of the human
 CC progesterone receptor (hPR) and block the translation of the hPR mRNA,
 CC inhibiting hPR synthesis. It can thus be used to counter the physiological
 CC action of progesterone. It can be used for the termination of a pregnancy
 CC or as an anticancer agent and for the isolation of oligonucleotides for
 CC the detection of hPR mRNA. (Updated on 25-MAR-2003 to correct PN field.)
 CC (Updated on 25-MAR-2003 to correct PR field.)
 XX
 XX Sequence 17 BP; 3 A; 6 C; 6 G; 2 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 9.3e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 632 CGGACCGGGTCATGA 646
 DB 1 CGGACCGGGTCATGA 15
 RESULT 1418
 AAAT01734/c
 ID AAAT01734 standard; DNA; 17 BP.
 XX
 AC AAAT01734;
 XX
 XX 17-DEC-1995 (first entry)
 DT
 XX
 XX Peptide nucleic acid targeting HPV genome.
 DE
 XX
 XX Peptide nucleic acid; PNA; cytomegalovirus; CMV; papillomavirus;
 KW antiviral; diagnostic; ss.
 XX
 XX Synthetic.
 OS
 XX
 XX Key Location/Qualifiers
 FH
 FT misc_feature 1..17
 FT /*tag= a
 FT /note= "at least one (and preferably all) of the backbone
 FT subunits are composed of amide units, so that the
 FT oligomer consists of the nucleobases attached covalently
 FT to a polyamide backbone"
 FT
 XX
 XX WO9504748-A1.
 PN
 XX
 XX 16-FEB-1995.
 PD
 XX
 XX 09-AUG-1994; 94WO-US009039.
 PF
 XX
 XX 09-AUG-1993; 93US-00104438.
 PR
 XX (ISIS-) ISIS PHARM INC.
 XX
 XX Anderson KP, Crooke ST, Mirabelli CK, Ecker DJ, Cowse LM;
 PI WPI; 1995-090841/12.
 XX
 XX New peptide nucleic acid oligomers hybridisable to cytomegalovirus or
 XX papilloma: virus - are stable anti-sense molecules with high affinity for
 FT single stranded DNA, used for treating infections.
 FT
 XX

PS Claim 10; Page 52; 65pp; English.

XX New oligomers are claimed which (A) have at least one peptide nucleic acid (PNA) subunit and (B) have a sequence hybridisable to AUG region, 5' untranslated region, intron/exon (1/E) junction or coding sequence of cytomegalovirus gene selected from DNA polymerase, IE1 and IE2, or hybridisable to the E, E2, E4, E5, E6, E7, L1 or L2 reading frames of a papillomavirus. The PNAs can be used to target RNA and single stranded DNA (ssDNA) to produce antisense-type gene regulation moieties. Hence they may be used therapeutically for modulating cytomegalovirus and papillomavirus processes and also as diagnostics (e.g., as probes for specific mRNAs). PNA oligomers have high affinity for complementary single stranded DNA. They are also able to form triple helices in which a first PNA strand binds with RNA or ssDNA and a second PNA strand binds with the resulting double helix or with the first PNA strand. The PNAs possess no significant charge and are water soluble, which facilitates cellular uptake. Further, since they contain amides of non-biological amino acids, they are biostable and resistant to enzymatic degradation by proteases. The present sequence targets a portion of the papillomavirus genome

XX
SQ Sequence 17 BP; 2 A; 8 C; 0 G; 7 T; 0 U; 0 Other;

Query Match 0.8%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 9.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1332 TGAAGAGGAGGGAGA 1346
DB 15 TGAAGAGGATGGAGA 1

RESULT 1419
AAAX63945

ID AAX63945 standard; RNA; 17 BP.

XX AC AAX63945;

DT 20-JUL-1999 (first entry)

DE Rabbit stromelysin hammerhead target SEQ ID NO:577.

XX Arthritic condition; graft tolerance; immune response; target; cleavage; hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase; stromelysin; synovial membrane; joint; arthritis; osteoarthritis; rheumatoid arthritis; autoimmune disease; allergy; inflammation; diagnosis; ss.

XX Oryctolagus cuniculus.

XX WO9618736-A2.

PD 20-JUN-1996.

XX 22-NOV-1995; 95WO-US015516.

XX 13-DEC-1994; 94US-00354920.

PR 23-DEC-1994; 94US-00363253.

PR 23-DEC-1994; 94US-00363254.

PR 17-FEB-1995; 95US-00390850.

PR 20-APR-1995; 95US-00426124.

PR 02-MAY-1995; 95US-00432874.

PR 04-MAY-1995; 95US-00434509.

PR 07-JUL-1995; 95US-0000951P.

PR 07-AUG-1995; 95US-00512861.

PR 05-OCT-1995; 95US-00541365.

XX (RIBO-) RIBOZYME PHARM INC.

XX Beigelman L, Stinchcomb DT, Jarvis T, Draper K, Pavco P;
PI Mcswiggen J, Gustofson J, Usman N, Wincott F, Matulic-Adamic J;
PI Karpelesky A, Thompson JD, Modak A, Burgin A;

XX WPI; 1996-300653/30.

XX Enzymatic nucleic acid molecules having a hammer-head motif - used for the treatment of arthritis, induction of graft tolerance or treatment of auto-immune diseases.

XX Example 1; Page 155; 307pp; English.

XX The present invention describes a novel enzymatic nucleic acid (ENA) having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues; (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii) at least ten 2'-O-methyl modifications; and (iv) a 3'-end modification. The ENA's can inhibit collagenase and stromelysin production in the synovial membrane of joints for the treatment or prevention of arthritis, particularly osteoarthritis or rheumatoid arthritis. The ENA's can also be used to treat antigen presenting cells of a donor to induce tolerance in a recipient to an alloantigen of a donor. They can also be used for enhancing graft tolerance or for treating autoimmune disease, and for treating allergies and other inflammatory conditions. The ENA's can also be used in diagnosis. Ribozyme therapy impacts on the expression of stromelysin without introducing the non-specific effects upon gene expression which accompany treatment with retinoids and dexamethasone. The concentration of ribozyme required to affect a therapeutic treatment is lower than that required of antisense molecules, and is highly specific. The present sequence is used in the exemplification of the present invention

XX
SQ Sequence 17 BP; 4 A; 2 C; 1 G; 0 T; 10 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 26.7%; Pred. No. 9.3e+02;
Matches 4; Conservative 10; Mismatches 1; Indels 0; Gaps 0;

QY 2044 ACTATTTTCATTTT 2058
DB 1 ACUGUUUUCUUUUU 15

RESULT 1420
AAAX63965

ID AAX63965 standard; RNA; 17 BP.

XX AC AAX63965;

XX 20-JUL-1999 (first entry)

XX Rabbit stromelysin hammerhead target SEQ ID NO:597.

XX Arthritic condition; graft tolerance; immune response; target; cleavage; hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase; stromelysin; synovial membrane; joint; arthritis; osteoarthritis; rheumatoid arthritis; autoimmune disease; allergy; inflammation; diagnosis; ss.

XX Oryctolagus cuniculus.

XX WO9618736-A2.

XX 20-JUN-1996.

XX 22-NOV-1995; 95WO-US015516.

XX 13-DEC-1994; 94US-00354920.

PR 23-DEC-1994; 94US-00363253.

PR 23-DEC-1994; 94US-00363254.

PR 17-FEB-1995; 95US-00390850.

PR 20-APR-1995; 95US-00426124.

PR 02-MAY-1995; 95US-00432874.

PR 04-MAY-1995; 95US-00434509.

PR 07-JUL-1995; 95US-0000951P.

PR 07-JUL-1995; 95US-0000974P.

PR 07-AUG-1995; 95US-00512861.

AAV48412-84 represent antisense oligonucleotides directed against transforming growth factor beta-1 (TGF beta-1). The oligonucleotides exemplify the invention. The specification describes oligonucleotides that contain 8-30 nucleotides, which contain at most 8 nucleotides that can each form three hydrogen bonds to cytosine; do not contain four consecutive nucleotides able to form three H-bonds each to four consecutive cytosines; do not contain two sequences of three consecutive nucleotides each able to form three H-bonds to three consecutive (2R) or three such bonds (3R) is given by $2R/3R = 0.33-0.72$. The oligonucleotides are used to modulate expression of genes, particularly the genes for p3, Erbb-2, junB, junD, TGF-beta 1 or beta 2 to control proliferation of primary cell cultures (e.g. bone marrow stem, liver or kidney cells, osteoclasts, osteoblasts and/or keratinocytes). The oligonucleotides can also be used to analyse function of proteins (by altering their expression or activity) and therapeutically, e.g. in cases of cancer or (targeting TGF) for stimulating the immune system

Sequence 17 BP; 6 A; 3 C; 5 G; 3 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 9.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 573 GCTGTACATTGACAT 587
|||||
Db 17 GCTGTACATTGACTT 3

RESULT 1423
AAAL7499
ID AAAL7499 standard; RNA; 17 BP.
XX
AC AAAL7499;
XX
DT 19-JUN-2000 (first entry)
XX
DE Aryl hydrocarbon nuclear transport substrate sequence SEQ ID NO:725.
XX
KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
KW hammerhead ribozyme; angiogenic factor; cytosolic; antidiabetic;
KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
KW dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
KW age related macular degeneration; inflammation; neovascular glaucoma;
KW myopic degeneration; psoriasis; verruca vulgaris; angiobroma;
KW tuberculous sclerosis; pot-wine stain; Sturge Weber syndrome;
KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
XX
OS Homo sapiens.
XX
PN WO9950403-A2.
XX
PD 07-OCT-1999.
XX
PF 24-MAR-1999; 99WO-US006507.
XX
PR 27-MAR-1998; 98US-0079678P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
XX WPI; 1999-591315/50.
XX
PT Novel ribozymes for modulating the synthesis, expression and/or stability
PT of an mRNA encoding an angiogenic factors.
XX
PS Claim 53; Page 83; 305pp; English.
XX
CC The present invention describes enzymatic nucleic acid molecules with RNA
CC cleaving activity, which specifically cleave RNA encoded by an aryl
CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3

CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAAL775 to
CC AAAL7167 and AAAL7561 to AAAL7622 represent ribozyme sequences for ARNT,
CC and AAAL7168 to AAAL7560 and AAAL7623 to AAAL7684 represent their
CC corresponding target sequences; AAAL7685 to AAAL8385 and AAAL9087 to
CC AAAL9154 represent ribozyme sequences for Tie-2, and AAAL8386 to AAAL9086
CC and AAAL9155 to AAAL9222 represent their corresponding target sequences;
CC AAAL9223 to AAAL9361 and AAAL9501 to AAAL9595 represent ribozyme
CC sequences for integrin alpha 6 subunit, and AAAL20362 to AAAL21500 and
CC AAAL21596 to AAAL21688 represent their corresponding target sequences;
CC AAAL21689 to AAAL22475 and AAAL23263 to AAAL23342 represent ribozyme sequence
CC for integrin subunit beta 3, and AAAL22476 to AAAL23262, AAAL23343 to
CC AAAL23422 represent their corresponding target sequences. The ribozymes of
CC the invention are used for modulating the synthesis, expression and/or
CC stability of an mRNA encoding angiogenic factor, especially ARNT,
CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
CC especially used to treat cancer, diabetic retinopathy, age related
CC macular degeneration (ARMD), inflammation, and arthritis, as well as
CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
CC angiobroma of tuberculous sclerosis, pot-wine stains, Sturge Weber
CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
CC and other syndromes and diseases related to the levels of ARNT, Tie-2,
CC integrin subunit alpha-6, or integrin subunit beta-3
XX
SQ Sequence 17 BP; 3 A; 5 C; 5 G; 0 T; 4 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 66.7%; Pred. No. 9.3e+02;
Matches 10; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

QY 1679 TGAGCTCTTCCAGGA 1693
||||| :|||
Db 3 UGAGGCUUCCAGGA 17

RESULT 1424
AAAL7501
ID AAAL7501 standard; RNA; 17 BP.
XX
AC AAAL7501;
XX
DT 19-JUN-2000 (first entry)
XX
DE Aryl hydrocarbon nuclear transport substrate sequence SEQ ID NO:727.
XX
KW Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;
KW integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme;
KW hammerhead ribozyme; angiogenic factor; cytosolic; antidiabetic;
KW ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD;
KW dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis;
KW age related macular degeneration; inflammation; neovascular glaucoma;
KW myopic degeneration; psoriasis; verruca vulgaris; angiobroma;
KW tuberculous sclerosis; pot-wine stain; Sturge Weber syndrome;
KW Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
XX
OS Homo sapiens.
XX
PN WO9950403-A2.
XX
PD 07-OCT-1999.
XX
PF 24-MAR-1999; 99WO-US006507.
XX
PR 27-MAR-1998; 98US-0079678P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Pavco PA, Roberts E, Jarvis T, Coeshott C, Mcswiggen JA;
XX WPI; 1999-591315/50.
XX
PT Novel ribozymes for modulating the synthesis, expression and/or stability
PT of an mRNA encoding an angiogenic factors.

PS Claim 53; Page 83; 305pp; English.

XX The present invention describes enzymatic cleave RNA molecules with RNA

CC cleaving activity, which specifically cleave RNA encoded by an aryl

CC hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3

CC gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to

CC AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT,

CC and AAA17168 to AAA17560 and AAA17623 to AAA17684 represent their

CC corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to

CC AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA19086

CC and AAA19155 to AAA19222 represent their corresponding target sequences;

CC AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme

CC sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and

CC AAA21596 to AAA21688 represent their corresponding target sequences;

CC AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence

CC for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to

CC AAA23422 represent their corresponding target sequences. The ribozymes of

CC the invention are used for modulating the synthesis, expression and/or

CC stability of an mRNA encoding angiogenic factor, especially ARNT,

CC integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are

CC especially used to treat cancer, diabetic retinopathy, age related

CC macular degeneration (ARMD), inflammation, and arthritis, as well as

CC neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,

CC angioblastoma of tuberos scleriosis, pot-wine stains, Sturge Weber

CC syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,

CC and other syndromes and diseases related to the levels of ARNT, Tie-2,

CC integrin subunit alpha-6, or integrin subunit beta-3

XX

SQ Sequence 17 BP; 4 A; 3 C; 6 G; 0 T; 4 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 17;

Best Local Similarity 73.3%; Pred. No. 9.3e+02;

Matches 11; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1680 GAGCTCTTCAGGAG 1694

DB |||||:|||||

1 GAGGCUUCCAGGAG 15

RESULT 1425

AAA36231/C

ID AAA36231 standard; DNA; 17 BP.

AC AAA36231;

XX

XX 26-JUL-2000 (first entry)

XX

XX Human genomic SNP allele specific oligonucleotide SEQ ID NO:288.

XX

XX Human; single nucleotide polymorphism; SNP; genotyping; DNA analysis;

XX allele specific oligonucleotide; ASO; reduced complexity genome; RCG;

XX genomic classification; identification; DNA fingerprinting;

XX tumour characterisation; hybridisation; ss.

XX

XX Homo sapiens.

OS

XX WO200018960-A2.

XX

XX 06-APR-2000.

XX

XX 24-SEP-1999; 99WO-US022283.

XX

XX 25-SEP-1998; 98US-0101757P.

XX

XX (MASI) MASSACHUSETTS INST TECHNOLOGY.

XX

XX Landers JE, Jordan B, Houseman DE, Charest A;

XX

XX WPI; 2000-293181/25.

XX

XX Detection of single nucleotide polymorphisms in genomes by preparation

XX and analysis of reduced complexity genomes, useful for genotyping,

XX fingerprinting and determining allele frequency of SNPs.

XX

PS Claim 53; Page 83; 305pp; English.

XX A method has been developed for detecting the presence or absence of a

CC single nucleotide polymorphism (SNP) allele in a genomic sample. The

CC method comprises preparing a reduced complexity genome (RCG) from the

CC genomic sample and analysing the RCG for the presence or absence of a SNP

CC allele. The method can be used to characterise a tumour, to generate a

CC genomic pattern for an individual genome or to generate a genomic

CC classification code for a genome. The method can be used to assess

CC whether a subject is at risk for developing a disease or to identify a

CC set of SNP alleles associated with a disease. The method can also be used

CC to perform linkage analysis. AAA35944 to AAA35947 represent sequences

CC used in the exemplification of the present invention. AAA35948 to

CC AAA36632 represent nucleotide sequences containing SNPs

XX

SQ Sequence 17 BP; 6 A; 4 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 17;

Best Local Similarity 93.3%; Pred. No. 9.3e+02;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1062 CTTTGAATACCTTTGG 1076

DB |||||:|||||

17 CTTTGAATACCTTTGG 3

RESULT 1426

AAA24905/C

ID AAA24905 standard; DNA; 17 BP.

XX

XX AAA24905;

XX

XX 19-JUL-2000 (first entry)

XX

XX Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:1403.

XX

XX Oestrogen receptor; c-ras; k-ras; bcl-2; ribozyme; cleavage;

XX hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide;

XX gene expression modification; cancer; phosphorothioate; endonuclease;

XX anticancer; breast cancer; endometrium cancer; ss.

XX

XX Homo sapiens.

OS

XX WO9954459-A2.

XX

XX 28-OCT-1999.

XX

XX 19-APR-1999; 99WO-US008547.

XX

XX 20-APR-1998; 98US-0082404P.

XX

XX 23-JUN-1998; 98US-00103636.

XX

XX (RIBO-) RIBOZYME PHARM INC.

XX

XX Thompson JD, Beigelman L, Mcswiggen JA, Karpeisky A, Bellon L;

XX Reynolds M, Zwick M, Jarvis T, Woolf T, Haerberli P;

XX Matulic-Adamic J;

XX

XX WPI; 2000-013248/01.

XX

XX New nucleic acids that interact, and optionally cleave, target sequences,

XX used to treat cancer.

XX

XX Claim 77; Page 62; 148pp; English.

XX

XX The present invention describes nucleic acids (A) that interact stably

XX with a target sequence and contain at least one phosphorothioate

XX link, having endonuclease activity. (A), and more generally any catalytic

XX nucleic acid (A') that modulates expression of the oestrogen receptor

XX gene, are used to treat cancer (particularly of breast or endometrium),

XX in vivo or by transforming cells ex vivo and implanting treated cells, or

XX for other conditions associated with levels of oestrogen receptor.

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XX WO200018960-A2.

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XX Landers JE, Jordan B, Houseman DE, Charest A;

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CC allele. The method can be used to characterise a tumour, to generate a

CC genomic pattern for an individual genome or to generate a genomic

CC classification code for a genome. The method can be used to assess

CC whether a subject is at risk for developing a disease or to identify a

CC set of SNP alleles associated with a disease. The method can also be used

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XX

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Best Local Similarity 93.3%; Pred. No. 9.3e+02;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1062 CTTTGAATACCTTTGG 1076

DB |||||:|||||

17 CTTTGAATACCTTTGG 3

RESULT 1426

AAA24905/C

ID AAA24905 standard; DNA; 17 BP.

XX

XX AAA24905;

XX

XX 19-JUL-2000 (first entry)

XX

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XX gene expression modification; cancer; phosphorothioate; endonuclease;

XX anticancer; breast cancer; endometrium cancer; ss.

XX

XX Homo sapiens.

OS

XX WO9954459-A2.

XX

XX 28-OCT-1999.

XX

XX 19-APR-1999; 99WO-US008547.

XX

XX 20-APR-1998; 98US-0082404P.

XX

XX 23-JUN-1998; 98US-00103636.

XX

XX (RIBO-) RIBOZYME PHARM INC.

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XX Thompson JD, Beigelman L, Mcswiggen JA, Karpeisky A, Bellon L;

XX Reynolds M, Zwick M, Jarvis T, Woolf T, Haerberli P;

XX Matulic-Adamic J;

XX

XX WPI; 2000-013248/01.

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XX used to treat cancer.

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XX Claim 77; Page 62; 148pp; English.

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XX link, having endonuclease activity. (A), and more generally any catalytic

XX nucleic acid (A') that modulates expression of the oestrogen receptor

XX gene, are used to treat cancer (particularly of breast or endometrium),

XX in vivo or by transforming cells ex vivo and implanting treated cells, or

XX for other conditions associated with levels of oestrogen receptor.

CC Because of the high selectivity for targeted RNA, (A) can also be used to
 CC correlate inhibition of gene expression with alterations in phenotype,
 CC particularly for identification of therapeutic targets, and as research
 CC reagents (for RNA, in the same way that restriction endonucleases are
 CC used with DNA). The combination of modifications in (A) improves
 CC resistance to nucleases, binding affinity and/or activity. AAA23503 to
 CC AAA24747 represent oestrogen receptor hammerhead ribozyme sequences, and
 CC AAA25993 to AAA25992 represent their corresponding target sequences.
 CC AAA25993 to AAA26105 represent oestrogen receptor hairpin ribozyme
 CC sequences, and AAA26107 to AAA26218 represent their corresponding target
 CC sequences. AAA26219 to AAA26271 represent other ribozyme sequences and
 CC antisense oligonucleotides used in the exemplification of the present
 CC invention
 XX
 SQ Sequence 17 BP; 4 A; 5 C; 2 G; 6 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 9.3e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1843 ACATTCTAGAGGGG 1857
 |||||
 Db 17 ACATTCTAGAGGTG 3

RESULT 1427
 AAC72366
 ID AAC72366 standard; DNA; 17 BP.

AC AAC72366;

DT 09-FEB-2001 (first entry)

DE Single nucleotide polymorphism PCR primer #1464.

XX Single nucleotide polymorphism; SNP; human; genetic disease;
 KW disease susceptibility; cardiovascular system; endocrine system;
 KW neurological system; forensic testing; paternity testing; PCR primer; ss.

OS Homo sapiens.

PN WO200058519-A2.

XX 05-OCT-2000.

XX 30-MAR-2000; 2000WO-US008440.

XX 31-MAR-1999; 99US-0127248P.

XX (WHED) WHITEHEAD INST BIOMEDICAL RES.
 PA (AFFY-) AFFYMETRIX INC.

PI Altshuler D, Cargill M, Daley GQ, Ireland JS, Lander ES;
 PI Lipshutz RJ, Patil N, Sklar P;

XX WPI; 2000-611722/58.

XX Nucleic acid selected from one of 106 genes comprising single nucleotide
 PT polymorphisms, allele-specific oligonucleotides to the genes are useful
 PT for phenotypic correlations, forensics, paternity testing, medicine and
 PT genetic analysis.

XX Claim 8; Fig 5; 214pp; English.

XX The present invention is concerned with a number of human single
 CC nucleotide polymorphisms (SNPs) which the inventors identified in human
 CC genes. These SNPs can be used in disease diagnosis and prediction of an
 CC individual's susceptibility to disease, in forensic and paternity testing
 CC and in genetic mapping. In particular, the SNPs of the invention can be
 CC used to diagnose susceptibility to diseases of the cardiovascular,
 CC endocrine and neurological systems, such as coronary artery disease,
 CC schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's
 CC diseases

XX
 SQ Sequence 17 BP; 4 A; 6 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 9.3e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1190 CACCTGGGGTCCAAA 1204
 |||||
 Db 1 CAGCTGGGGTCCAAA 15

RESULT 1428

AAC72375
 ID AAC72375 standard; DNA; 17 BP.

XX AAC72375;

XX 09-FEB-2001 (first entry)

DE Single nucleotide polymorphism PCR primer #1470.

XX Single nucleotide polymorphism; SNP; human; genetic disease;

KW disease susceptibility; cardiovascular system; endocrine system;

KW neurological system; forensic testing; paternity testing; PCR primer; ss.

XX Homo sapiens.

XX WO200058519-A2.

XX 05-OCT-2000.

XX 30-MAR-2000; 2000WO-US008440.

XX 31-MAR-1999; 99US-0127248P.

XX (WHED) WHITEHEAD INST BIOMEDICAL RES.
 PA (AFFY-) AFFYMETRIX INC.

XX Altshuler D, Cargill M, Daley GQ, Ireland JS, Lander ES;
 PI Lipshutz RJ, Patil N, Sklar P;

XX WPI; 2000-611722/58.

XX Nucleic acid selected from one of 106 genes comprising single nucleotide
 PT polymorphisms, allele-specific oligonucleotides to the genes are useful
 PT for phenotypic correlations, forensics, paternity testing, medicine and
 PT genetic analysis.

XX Claim 8; Fig 5; 214pp; English.

XX The present invention is concerned with a number of human single
 CC nucleotide polymorphisms (SNPs) which the inventors identified in human
 CC genes. These SNPs can be used in disease diagnosis and prediction of an
 CC individual's susceptibility to disease, in forensic and paternity testing
 CC and in genetic mapping. In particular, the SNPs of the invention can be
 CC used to diagnose susceptibility to diseases of the cardiovascular,
 CC endocrine and neurological systems, such as coronary artery disease,
 CC schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's
 CC diseases

XX Sequence 17 BP; 4 A; 6 C; 5 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 9.3e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1190 CACCTGGGGTCCAAA 1204
 |||||
 Db 1 CAGCTGGGGTCCAAA 15

RESULT 1429

CC encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription
 CC factor gene, IRF-2 and/or the C/CAAT Displacement Protein (CDP).
 CC Inhibition of the repressors removes prevents inhibition (and
 CC consequently increases expression of) genes involved in the production of
 CC erythropoietin, granulocyte colony stimulating factor protein and
 CC interferon alpha

XX Sequence 17 BP; 0 A; 6 C; 3 G; 8 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 17;

Best Local Similarity 93.3%; Pred. No. 9.3e+02;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1420 CCAGAGGAGAGAAA 1434

Db 17 CCAGAGGGGAGAGAAA 3

RESULT 1432

ABK03460/c

ID ABK03460 standard; RNA; 17 BP.

AC ABK03460;

DT 12-MAR-2002 (first entry)

XX Human CD20 Zinzyme #11.

XX Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
 KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
 KW DNzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
 KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
 KW inflammatory arthropathy; central nervous system injury;
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
 KW Parkinson's disease; ataxia; Huntington's disease;
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.

OS Homo sapiens.

OS Synthetic.

PN WO200159103-A2.

XX 16-AUG-2001.

XX 09-FEB-2001; 2001WO-US004273.

XX 11-FEB-2000; 2000US-0181797P.

XX 28-FEB-2000; 2000US-0185516P.

XX 06-MAR-2000; 2000US-0187128P.

XX (RIBO-) RIBOZYME PHARM INC.

PA (BLAT/) BLATT L.

PA (MCSW/) MCSWIGGEN J.

PA (CHOW/) CHOWRIRA B. M.

XX Blatt L, Mcswiggen J, Chowrira BM;

XX WPI; 2001-607195/69.

XX Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
 PT constructs, which down regulate expression of a CD20 gene or neurite
 PT growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
 PT central nervous system injury.

PS Claim 30; Page 154; 200pp; English.

XX The invention relates to a nucleic acid molecule which down regulates
 CC expression of a CD20 gene and a nucleic acid molecule which down
 CC regulates expression of a neurite growth inhibitor gene (NOGO). The

CC nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
 CC DNzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
 CC possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) pr
 CC an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA
 CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA
 CC of CD20 in the presence of a divalent cation that is preferably Mg²⁺.
 CC Furthermore, it may be contacted with a cell to reduce CD20 activity of
 CC the cell and treat a patient having a condition associated with the level
 CC of CD20. The treatment may further comprise the use of one or more
 CC therapies. In particular, the CD20 targeting nucleic acid may be used to
 CC treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
 CC Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic
 CC leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
 CC lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
 CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-
 CC targeting nucleic acid is used to cleave RNA of the NOGO gene in the
 CC presence of a divalent cation that is preferably Mg²⁺. Furthermore, the
 CC nucleic acid may be contacted with a cell to reduce NOGO activity of the
 CC cell and treat a patient having a condition associated with the level of
 CC NOGO. The treatment may further comprise the use of one or more
 CC therapies. In particular, the NOGO-targetting nucleic acid may be used to
 CC treat central nervous system (CNS) injury and cerebrovascular accident
 CC (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
 CC chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
 CC Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
 CC disease, muscular dystrophy, and/or other neurodegenerative disease
 CC states which respond to the modulation of NOGO expression. The present
 CC sequence is a zinzyme molecule of the invention

XX SQ Sequence 17 BP; 6 A; 5 C; 3 G; 0 T; 3 U; 0 Other;

Query Match

Best Local Similarity 0.6%; Score 13.4; DB 1; Length 17;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1072 TTGTGACCAGATTTC 1086

Db 15 TTGTGACCAGATTGC 1

RESULT 1433

ABK02097

ID ABK02097 standard; RNA; 17 BP.

XX AC ABK02097;

XX DT 12-MAR-2002 (first entry)

XX Human NOGO DNzyme #9.

XX Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
 KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
 KW DNzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
 KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
 KW inflammatory arthropathy; central nervous system injury;
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
 KW Parkinson's disease; ataxia; Huntington's disease;
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.

OS Homo sapiens.

OS Synthetic.

PN WO200159103-A2.

XX 16-AUG-2001.

XX 09-FEB-2001; 2001WO-US004273.

XX 11-FEB-2000; 2000US-0181797P.

SQ Sequence 17 BP; 1 A; 8 C; 6 G; 0 T; 2 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 9.3e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 4 CCGAGCGCGGCGCG 18
 |||||
 DB 15 CAGAGCGCGGCGG 1

RESULT 1435
 ABK02371
 ID ABK02371 standard; RNA; 17 BP.
 AC ABK02371;
 DT 12-MAR-2002 (first entry)
 DE Human NOGO Amberzyme #43.

Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
 cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;
 muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
 DNzyme; inozyme; G-cleaver; amberzyme; zinczyme; lymphoma; leukaemia;
 B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
 human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
 MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
 inflammatory arthropathy; central nervous system injury;
 cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
 chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
 Parkinson's disease; ataxia; Huntington's disease;
 Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.

Homo sapiens.
 Synthetic.
 WO200159103-A2.
 16-AUG-2001.

09-FEB-2001; 2001WO-US004273.
 11-FEB-2000; 2000US-0181797P.
 28-FEB-2000; 2000US-0185516P.
 06-MAR-2000; 2000US-0187128P.

(RIBO-) RIBOZYME PHARM INC.
 (BLAT/) BLATT L.
 (MCSW/) MCSWIGGEN J.
 (CHOW/) CHOWRIRA B M.

Blatt L, Mcswiggen J, Chowrira BM;
 WPI; 2001-607195/69.

Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and central nervous system injury.

Claim 88; Page 131; 200pp; English.

The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NOGO). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a DNzyme) an inozyme (an endolytic nucleic acid cleaving a RNA molecule possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or an amberzyme (cleaving RNA with an NGN triplet), a zinczyme (cleaving RNA with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA of CD20 in the presence of a divalent cation that is preferably Mg^{2+} . Furthermore, it may be contacted with a cell to reduce CD20 activity of

CC the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more therapies. In particular, the CD20 targeting nucleic acid may be used to treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma, immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-targeting nucleic acid is used to cleave RNA of the NOGO gene in the presence of a divalent cation that is preferably Mg^{2+} . Furthermore, the nucleic acid may be contacted with a cell to reduce NOGO activity of the cell and treat a patient having a condition associated with the level of NOGO. The treatment may further comprise the use of one or more therapies. In particular, the NOGO-targeting nucleic acid may be used to treat central nervous system (CNS) injury and cerebrovascular accident (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS), Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob disease, muscular dystrophy, and/or other neurodegenerative disease states which respond to the modulation of NOGO expression. The present sequence is an amberzyme molecule of the invention

SQ Sequence 17 BP; 7 A; 3 C; 7 G; 0 T; 0 U; 0 Other;
 Query Match 0.6%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 9.3e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1246 GATGAGGACGAGAC 1260
 |||||
 DB 3 GACGAGGACGAGAC 17

RESULT 1436
 ABK00496
 ID ABK00496 standard; RNA; 17 BP.
 AC ABK00496;
 DT 12-MAR-2002 (first entry)
 DE Human NOGO Hammerhead Ribozyme #496.

Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
 cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;
 muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
 DNzyme; inozyme; G-cleaver; amberzyme; zinczyme; lymphoma; leukaemia;
 B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
 human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
 MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
 inflammatory arthropathy; central nervous system injury;
 cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
 chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
 Parkinson's disease; ataxia; Huntington's disease;
 Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.

Homo sapiens.
 Synthetic.
 WO200159103-A2.
 16-AUG-2001.

09-FEB-2001; 2001WO-US004273.
 11-FEB-2000; 2000US-0181797P.
 28-FEB-2000; 2000US-0185516P.
 06-MAR-2000; 2000US-0187128P.

(RIBO-) RIBOZYME PHARM INC.
 (BLAT/) BLATT L.
 (MCSW/) MCSWIGGEN J.
 (CHOW/) CHOWRIRA B M.

Blatt L, Mcswiggen J, Chowrira BM;
 WPI; 2001-607195/69.

Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and central nervous system injury.

Claim 88; Page 131; 200pp; English.

The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NOGO). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a DNzyme) an inozyme (an endolytic nucleic acid cleaving a RNA molecule possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or an amberzyme (cleaving RNA with an NGN triplet), a zinczyme (cleaving RNA with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA of CD20 in the presence of a divalent cation that is preferably Mg^{2+} . Furthermore, it may be contacted with a cell to reduce CD20 activity of

XX	Blatt L, Mcswiggen J, Chowrira BM;	
XX	WPI; 2001-607195/69.	
XX	Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and central nervous system injury.	
XX	Claim 88; Page 73; 200pp; English.	
XX	The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NOGO). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a DNzyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or an amberyzyme (cleaving RNA with an NGN triplet), a zinyzyme (cleaving RNA with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA of CD20 in the presence of a divalent cation that is preferably Mg ²⁺ . Furthermore, it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more therapies. In particular, the CD20 targeting nucleic acid may be used to treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma, immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-targeting nucleic acid is used to cleave RNA of the NOGO gene in the presence of a divalent cation that is preferably Mg ²⁺ . Furthermore, the nucleic acid may be contacted with a cell to reduce NOGO activity of the cell and treat a patient having a condition associated with the level of NOGO. The treatment may further comprise the use of one or more therapies. In particular, the NOGO-targeting nucleic acid may be used to treat central nervous system (CNS) injury and cerebrovascular accident (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS), Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob disease, muscular dystrophy, and/or other neurodegenerative disease states which respond to the modulation of NOGO expression. The present sequence is a hammerhead ribozyme of the invention	
XX	Sequence 17 BP; 3 A; 4 C; 4 G; 0 T; 6 U; 0 Other;	
XX	Query Match	0.6%; Score 13.4; DB 1; Length 17;
XX	Best Local Similarity	60.0%; Pred. No. 9.3e+02;
XX	Matches	9; Conservative 5; Mismatches 1; Indels 0; Gaps 0;
Qy	1827 AAGGTGCCTTATTG 1841	
Db	1 AAGGUGCUUAUG 15	
RESULT 1437		
ID	ABK02723/c	
XX	ABK02723 standard; RNA; 17 BP.	
AC	ABK02723;	
XX		
DT	12-MAR-2002 (first entry)	
XX	Human CD20 Hammerhead ribozyme #22.	
XX	Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; neurotropic; neuroprotective; antiparkinsonian; muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme; DNzyme; inozyme; G-cleaver; amberyzyme; zinyzyme; lymphoma; leukaemia; B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia; human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma; MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury;	
KW	cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis; chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; Parkinson's disease; ataxia; Huntington's disease; Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.	
OS	Homo sapiens.	
OS	Synthetic.	
XX		
XX	WO200159103-A2.	
XX		
XX	16-AUG-2001.	
XX		
XX	09-FEB-2001; 2001WO-US004273.	
XX		
XX	11-FEB-2000; 2000US-0181797P.	
PR	28-FEB-2000; 2000US-0185516P.	
PR	06-MAR-2000; 2000US-0187128P.	
XX	(RIBO-) RIBOZYME PHARM INC.	
PA	(BLAT/) BLATT L.	
PA	(MCSW/) MCSWIGGEN J.	
PA	(CHOW/) CHOWRIRA B M.	
XX	Blatt L, Mcswiggen J, Chowrira BM;	
XX	WPI; 2001-607195/69.	
XX	Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and central nervous system injury.	
XX	Claim 30; Page 140; 200pp; English.	
XX	The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NOGO). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a DNzyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or an amberyzyme (cleaving RNA with an NGN triplet), a zinyzyme (cleaving RNA with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA of CD20 in the presence of a divalent cation that is preferably Mg ²⁺ . Furthermore, it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more therapies. In particular, the CD20 targeting nucleic acid may be used to treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma, immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-targeting nucleic acid is used to cleave RNA of the NOGO gene in the presence of a divalent cation that is preferably Mg ²⁺ . Furthermore, the nucleic acid may be contacted with a cell to reduce NOGO activity of the cell and treat a patient having a condition associated with the level of NOGO. The treatment may further comprise the use of one or more therapies. In particular, the NOGO-targeting nucleic acid may be used to treat central nervous system (CNS) injury and cerebrovascular accident (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS), Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob disease, muscular dystrophy, and/or other neurodegenerative disease states which respond to the modulation of NOGO expression. The present sequence is a hammerhead ribozyme of the invention	
XX	Sequence 17 BP; 5 A; 4 C; 3 G; 0 T; 5 U; 0 Other;	
XX	Query Match	0.6%; Score 13.4; DB 1; Length 17;
XX	Best Local Similarity	93.3%; Pred. No. 9.3e+02;
XX	Matches	14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy	1073 TTGGACCAGATTCA 1087	

DB 17 TTGGACCAGATTGCA 3
 RESULT 1438
 ABK01546/c
 ID ABK01546 standard; RNA; 17 BP.
 XX
 AC ABK01546;
 DT 12-MAR-2002 (first entry)
 XX
 DE Human NOGO G-Cleaver #2.
 XX
 KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
 KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
 KW DNzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
 KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
 KW inflammatory arthropathy; central nervous system injury;
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
 KW Parkinson's disease; ataxia; Huntington's disease;
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 PN WO200159103-A2.
 XX
 PD 16-AUG-2001.
 XX
 PF 09-FEB-2001; 2001WO-US004273.
 XX
 PR 11-FEB-2000; 2000US-0181797P.
 PR 28-FEB-2000; 2000US-0185516P.
 PR 06-MAR-2000; 2000US-0187128P.
 PA (RIBO-) RIBOZYME PHARM INC.
 PA (BLAT/) BLATT L.
 PA (MCSW/) MCSWIGGEN J.
 PA (CHOW/) CHOWRIRA B M.
 XX
 PI Blatt L, Mcswiggen J, Chowrira BM;
 XX
 DR WPI; 2001-607195/69.
 XX
 PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and central nervous system injury.
 XX
 ES Claim 88; Page 92; 200pp; English.
 XX
 CC The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NOGO). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a DNzyme) an inozyme (an endolytic nucleic acid cleaving an RNA molecule possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA of CD20 in the presence of a divalent cation that is preferably Mg²⁺. Furthermore, it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more therapies. In particular, the CD20 targeting nucleic acid may be used to treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,

CC immune thrombocytopaenia, and inflammatory arthropathy. The NOGO-targeting nucleic acid is used to cleave RNA of the NOGO gene in the presence of a divalent cation that is preferably Mg²⁺. Furthermore, the nucleic acid may be contacted with a cell to reduce NOGO activity of the cell and treat a patient having a condition associated with the level of NOGO. The treatment may further comprise the use of one or more therapies. In particular, the NOGO-targeting nucleic acid may be used to treat central nervous system (CNS) injury and cerebrovascular accident (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS), Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob disease, muscular dystrophy, and/or other neurodegenerative disease states which respond to the modulation of NOGO expression. The present sequence is a G-cleaver molecule of the invention
 XX
 SQ Sequence 17 BP; 2 A; 8 C; 5 G; 0 T; 2 U; 0 Other;
 Query Match 0.6%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 3e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 4 CCGAGCCGCGGCGG 18
 Db 17 CAGAGCCGCGGCGG 3
 RESULT 1439
 ABK01720
 ID ABK01720 standard; RNA; 17 BP.
 XX
 AC ABK01720;
 DT 12-MAR-2002 (first entry)
 XX
 DE Human NOGO Zinzyme #42.
 XX
 KW Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
 KW cerebroprotective; neurotropic; neuroprotective; antiparkinsonian;
 KW muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;
 KW DNzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;
 KW B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
 KW human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
 KW MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
 KW inflammatory arthropathy; central nervous system injury;
 KW cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis;
 KW chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
 KW Parkinson's disease; ataxia; Huntington's disease;
 KW Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
 XX
 OS Homo sapiens.
 OS Synthetic.
 XX
 PN WO200159103-A2.
 XX
 PD 16-AUG-2001.
 XX
 PF 09-FEB-2001; 2001WO-US004273.
 XX
 PR 11-FEB-2000; 2000US-0181797P.
 PR 28-FEB-2000; 2000US-0185516P.
 PR 06-MAR-2000; 2000US-0187128P.
 PA (RIBO-) RIBOZYME PHARM INC.
 PA (BLAT/) BLATT L.
 PA (MCSW/) MCSWIGGEN J.
 PA (CHOW/) CHOWRIRA B M.
 XX
 PI Blatt L, Mcswiggen J, Chowrira BM;
 XX
 DR WPI; 2001-607195/69.
 XX
 PT Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite

PT The invention relates to a nucleic acid molecule which down regulates
PT expression of a CD20 gene and a nucleic acid molecule which down
XX regulates expression of a neurite growth inhibitor gene (NGO). The
PS nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
XX DNzyme) an Inozyme (an endolytic nucleic acid cleaving an RNA molecule
XX possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or
XX an amberyzyme (cleaving RNA with an NGN triplec), a zinyzyme (cleaving RNA
XX with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA
XX of CD20 in the presence of a divalent cation that is preferably Mg²⁺.
XX Furthermore, it may be contacted with a cell to reduce CD20 activity of
XX the cell and treat a patient having a condition associated with the level
XX of CD20. The treatment may further comprise the use of one or more
XX therapies. In particular, the CD20 targeting nucleic acid may be used to
XX treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
XX Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, mantle-cell
XX leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
XX lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
XX immune thrombocytopenia, and inflammatory arthropathy. The NGO-
XX targeting nucleic acid is used to cleave RNA of the NGO gene in the
XX presence of a divalent cation that is preferably Mg²⁺. Furthermore, the
XX nucleic acid may be contacted with a cell to reduce NGO activity of the
XX cell and treat a patient having a condition associated with the level of
XX NGO. The treatment may further comprise the use of one or more
XX therapies. In particular, the NGO-targeting nucleic acid may be used to
XX treat central nervous system (CNS) injury and cerebrovascular accident
XX (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
XX chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
XX Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
XX disease, muscular dystrophy, and/or other neurodegenerative disease
XX states which respond to the modulation of NGO expression. The present
XX sequence is a zinyzyme molecule of the invention

Claim 88; Page 94; 200pp; English.

XX The invention relates to a nucleic acid molecule which down regulates
XX expression of a CD20 gene and a nucleic acid molecule which down
XX regulates expression of a neurite growth inhibitor gene (NGO). The
XX nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
XX DNzyme) an Inozyme (an endolytic nucleic acid cleaving an RNA molecule
XX possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) or
XX an amberyzyme (cleaving RNA with an NGN triplec), a zinyzyme (cleaving RNA
XX with a YGY motif). The CD20-targeting nucleic acid is used to cleave RNA
XX of CD20 in the presence of a divalent cation that is preferably Mg²⁺.
XX Furthermore, it may be contacted with a cell to reduce CD20 activity of
XX the cell and treat a patient having a condition associated with the level
XX of CD20. The treatment may further comprise the use of one or more
XX therapies. In particular, the CD20 targeting nucleic acid may be used to
XX treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-
XX Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, mantle-cell
XX leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
XX lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma,
XX immune thrombocytopenia, and inflammatory arthropathy. The NGO-
XX targeting nucleic acid is used to cleave RNA of the NGO gene in the
XX presence of a divalent cation that is preferably Mg²⁺. Furthermore, the
XX nucleic acid may be contacted with a cell to reduce NGO activity of the
XX cell and treat a patient having a condition associated with the level of
XX NGO. The treatment may further comprise the use of one or more
XX therapies. In particular, the NGO-targeting nucleic acid may be used to
XX treat central nervous system (CNS) injury and cerebrovascular accident
XX (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS),
XX chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS),
XX Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob
XX disease, muscular dystrophy, and/or other neurodegenerative disease
XX states which respond to the modulation of NGO expression. The present
XX sequence is a zinyzyme molecule of the invention

Sequence 17 BP; 4 A; 3 C; 3 G; 0 T; 7 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 60.0%; Pred. No. 9.3e+02;
Matches 9; Conservative 5; Mismatches 1; Indels 0; Gaps 0;

Qy 1826 AAAGGTCGCCCTTATT 1840
Db 3 AAAGGTCGCCCTTATT 17

RESULT 1440
ABA77941/c

ID ABA77941 standard; DNA; 17 BP.

AC ABA77941;

XX 24-JAN-2002 (first entry)

DE BRCA1 mutation correcting oligonucleotide SEQ ID NO: 787.

XX Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
XX retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
XX cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
XX adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
XX haemophilia; alpha thalasassaemia; haemoglobin alpha locus 1; MLH1; APOB;
XX mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
XX familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
XX UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
XX Alzheimer's disease; cytosstatic; antisickling; antianaemic; haemostatic;
XX antilipemic; ss.

OS Homo sapiens.

XX WO200173002-A2.

PN

PD 04-OCT-2001.

XX 27-MAR-2001; 2001WO-US009761.

XX 27-MAR-2000; 2000US-0192176P.

PR 27-MAR-2000; 2000US-0192179P.

PR 01-JUN-2000; 2000US-0208538P.

PR 30-OCT-2000; 2000US-0244989P.

XX (UYDE) UNIV DELAWARE.

XX Kmiec EB, Gamper HB, Rice MC;

XX WPI; 2001-639230/73.

XX Oligonucleotide for targeted alterations of genetic sequences and for
XX treating cystic fibrosis, comprises at least one mismatch and chemical
XX modification.

XX Claim 7; Page 92; 294pp; English.

XX The present invention provides single-stranded oligonucleotides which can
XX be used for the targeted alteration of genomic sequences, where the
XX oligonucleotide has at least one mismatch compared with the genomic
XX sequence to be altered. In particular, these sequences are directed at
XX the following genes: adenosine deaminase, p53, beta-globin,
XX retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
XX 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
XX apolipoprotein E (APOB), LDL receptor (LDLR), UDP-glucuronosyltransferase
XX (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
XX presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
XX such as cancer, adenosine deaminase deficiency, cystic fibrosis, diseases
XX haemophilia, hypercholesterolaemia, thalasassaemia, sickle cell anaemia,
XX Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
XX various syndromes. The present sequence is one of the gene correcting
XX oligonucleotides of the invention

Sequence 17 BP; 11 A; 4 C; 1 G; 1 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 9.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1923 TTGGTTCTGTTTTCG 1937
Db 15 TTGGTTCTGTTTTCG 1

RESULT 1441

ABA77942

ID ABA77942 standard; DNA; 17 BP.

AC ABA77942;

XX 24-JAN-2002 (first entry)

DE BRCA1 mutation correcting oligonucleotide SEQ ID NO: 788.

XX Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin;
XX retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V;
XX cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2;
XX adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis;
XX haemophilia; alpha thalasassaemia; haemoglobin alpha locus 1; MLH1; APOB;
XX mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR;
XX familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense;
XX UDP-glucuronosyltransferase; amyloid precursor protein; presenilin-1;
XX Alzheimer's disease; cytosstatic; antisickling; antianaemic; haemostatic;
XX antilipemic; ss.

OS Homo sapiens.

XX WO200173002-A2.

PN

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XX PD 04-OCT-2001.
XX XX
XX PF 27-MAR-2001; 2001WO-US009761.
XX XX
XX PR 27-MAR-2000; 2000US-0192176P.
XX PR 27-MAR-2000; 2000US-0192179P.
XX PR 01-JUN-2000; 2000US-0208538P.
XX PR 30-OCT-2000; 2000US-0244989P.
XX XX
XX PA (UYDE ) UNIV DELAWARE.
XX XX
XX PI Kmiec EB, Gamper HB, Rice MC;
XX XX WPI; 2001-639230/73.
XX XX
XX PT Oligonucleotide for targeted alterations of genetic sequences and for
XX PT treating cystic fibrosis, comprises at least one mismatch and chemical
XX PT modification.
XX XX
XX PS Claim 7; Page 92; 294pp; English.
XX XX
XX CC The present invention provides single-stranded oligonucleotides which can
XX CC be used for the targeted alteration of genomic sequences, where the
XX CC oligonucleotide has at least one mismatch compared with the genomic
XX CC sequence to be altered. In particular, these sequences are directed at
XX CC the following genes: adenosine deaminase, p53, beta-globin,
XX CC retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A
XX CC (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus
XX CC 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6,
XX CC apolipoprotein E (APOE), LDL receptor (LDLR), UDP-glucuronosyltransferase
XX CC (UGT1), amyloid precursor protein (APC), presenilin-1 (PSEN1) and
XX CC presenilin-2 (PSEN2). These can be used in the gene therapy of diseases
XX CC such as cancer, adenosine deaminase deficiency, cystic fibrosis,
XX CC haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
XX CC Alzheimer's disease, melanoma, adenomatous polyposis of the colon and
XX CC various syndromes. The present sequence is one of the gene correcting
XX CC oligonucleotides of the invention
XX
SQ Sequence 17 BP; 1 A; 1 C; 4 G; 11 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 9.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1923 TTGGTTCGTTTTCG 1937
Db 3 TTGGTTCGTTTTCG 17

RESULT 1442
ABN00981/c
ID ABN00981 standard; DNA; 17 BP.
XX
XX AC ABN00981;
XX
XX 29-MAY-2002 (first entry)
XX
XX Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:973.
XX
XX Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
XX KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
XX KW skeletal muscle disorder; amplicon; screening; ss.
XX
XX OS Homo sapiens.
XX
XX EN WO200192524-A2.
XX
XX 06-DEC-2001.
XX
XX 25-MAY-2001; 2001WO-US016981.
XX
XX 26-MAY-2000; 2000US-0207456P.

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PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 05-FEB-2001; 2001US-0268860P.
XX
XX (AEOM-) AEOMICA INC.
XX
XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX WPI; 2002-179446/23.
XX
XX New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
XX or as specific biomolecule capture probes for surface-enhanced laser
XX desorption ionization, comprises human myosin-like protein hGDMLP-1.
XX
XX Disclosure; SEQ ID NO 973; 214pp; English.
XX
XX The present invention describes a human genome-derived myosin-like
XX protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
XX 1 can be used in gene therapy and vaccine production. The hGDMLP-1
XX nucleic acids can be used as probes to detect, characterize and quantify
XX hGDMLP-1 nucleic acids in samples, as amplification substrates, to
XX provide initial substrates for the recombinant engineering of hGDMLP-1
XX protein variants having desired phenotypic improvements, and for
XX expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
XX used as immunogens to raise antibodies that specifically recognise hGDMLP
XX -1 proteins, as standards in assays used to determine the concentration
XX and/or amount specifically of hGDMLP proteins, as specific biomolecule
XX capture probes for surface-enhanced laser desorption ionisation, as
XX therapeutic supplement in patients having specific deficiency in hGDMLP-1
XX production, and in vaccines or for replacement therapy. The
XX polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
XX disorder associated with the expression of hGDMLP-1, in particular heart
XX and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
XX The present sequence represents an oligomer used in the screening of the
XX hGDMLP-1 sequence in the exemplification of the present invention. N.B.
XX The sequence data for this patent did not form part of the printed
XX specification, but was obtained in electronic format directly from WIPO
XX at ftp.wipo.int/pub/published_pct_sequence
XX
SQ Sequence 17 BP; 5 A; 7 C; 5 G; 0 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 9.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 465 TTGGGCTGGGGGCGCT 479
Db 15 TTGGGCTGGGGGCGCT 1

RESULT 1443
ABN08678
ID ABN08678 standard; DNA; 17 BP.
XX
XX AC ABN08678;
XX
XX 29-MAY-2002 (first entry)
XX
XX Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8670.
XX
XX Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
XX KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;

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Query Match 0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 9.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1457 CCAAGGAGGAGGAGC 1471
Db 2 CCAAGGAGGAGGAGC 16
|||||

RESULT 1445
ABN02218/C
ID ABN02218 standard; DNA; 17 BP.
XX
AC ABN02218;
XX
DT 29-MAY-2002 (first entry)
XX
DE Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:2210.
XX
KW Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
XX
OS Homo sapiens.
XX
PN WO200192524-A2.
XX
PD 06-DEC-2001.
XX
PF 25-MAY-2001; 2001WO-US016981.
XX
PR 26-MAY-2000; 2000US-0207456P.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 05-FEB-2001; 2001WO-US000670.
XX
XX (AEOM-) AEOMICA INC.
PA
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX
DR WPI; 2002-179446/23.
XX
PT New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
PT or as specific biomolecule capture probes for surface-enhanced laser
PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.
XX
PS Disclosure; SEQ ID NO 2210; 214pp; English.
XX
CC The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
CC nucleic acids can be used as probes to detect, characterize and quantify
CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMPLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1

CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMPLP-1, in particular heart
CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX
SQ Sequence 17 BP; 3 A; 2 C; 9 G; 3 T; 0 U; 0 Other;
XX
Query Match 0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 9.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1970 ACACTGCTGCTGCCCTC 1984
Db 16 ACACTGCTGCTGCCATC 2
|||||

RESULT 1446
ABN02746
ID ABN02746 standard; DNA; 17 BP.
XX
AC ABN02746;
XX
DT 29-MAY-2002 (first entry)
XX
DE Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:2738.
XX
KW Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
XX
OS Homo sapiens.
XX
PN WO200192524-A2.
XX
PD 06-DEC-2001.
XX
PF 25-MAY-2001; 2001WO-US016981.
XX
PR 26-MAY-2000; 2000US-0207456P.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
PR 30-JAN-2001; 2001WO-US000661.
PR 30-JAN-2001; 2001WO-US000662.
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 05-FEB-2001; 2001WO-US000670.
XX
XX (AEOM-) AEOMICA INC.
PA
PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
XX
DR WPI; 2002-179446/23.
XX
PT New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
PT or as specific biomolecule capture probes for surface-enhanced laser
PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.
XX
PS Disclosure; SEQ ID NO 2738; 214pp; English.
XX
CC The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-

CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
CC nucleic acids can be used as probes to detect, characterise and quantify
CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMPLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption/ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMPLP-1, in particular heart
CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX
SQ Sequence 17 BP; 2 A; 6 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 9.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1010 CAGCTGTGGCCCTGG 1024
DB 1 CAGCTGTGGCCCTGG 15

RESULT 1447
ABN00978/c
ID ABN00978 standard; DNA; 17 BP.
XX
AC ABN00978;
XX
DT 29-MAY-2002 (first entry)
XX
DE Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:970.
XX
KW Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
XX
OS Homo sapiens.
XX
PN WO200192524-A2.
XX
PD 06-DEC-2001.

XX 25-MAY-2001; 2001WO-US016981.
XX 26-MAY-2000; 2000US-0207456P.
XX 21-SEP-2000; 2000US-0234687P.
XX 27-SEP-2000; 2000US-0236359P.
XX 04-OCT-2000; 2000GB-00024263.
XX 30-JAN-2001; 2001WO-US000661.
XX 30-JAN-2001; 2001WO-US000662.
XX 30-JAN-2001; 2001WO-US000663.
XX 30-JAN-2001; 2001WO-US000664.
XX 30-JAN-2001; 2001WO-US000665.
XX 30-JAN-2001; 2001WO-US000666.
XX 30-JAN-2001; 2001WO-US000667.
XX 30-JAN-2001; 2001WO-US000668.
XX 30-JAN-2001; 2001WO-US000669.
XX 30-JAN-2001; 2001WO-US000670.
XX 05-FEB-2001; 2001US-0266860P.
XX (AEOM-) AEOMICA INC.
XX Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
PI

XX WPI; 2002-179446/23.
XX
XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
PT or as specific biomolecule capture probes for surface-enhanced laser
PT desorption/ionization, comprises human myosin-like protein hGDMPLP-1.
XX
XX Disclosure; SEQ ID NO 970; 214pp; English.
XX
XX The present invention describes a human genome-derived myosin-like
CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
CC nucleic acids can be used as probes to detect, characterise and quantify
CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
CC provide initial substrates for the recombinant engineering of hGDMPLP-1
CC protein variants having desired phenotypic improvements, and for
CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
CC -1 proteins, as standards in assays used to determine the concentration
CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
CC capture probes for surface-enhanced laser desorption/ionisation, as
CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
CC production, and in vaccines or for replacement therapy. The
CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
CC disorder associated with the expression of hGDMPLP-1, in particular heart
CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
CC The present sequence represents an oligomer used in the screening of the
CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequence
XX
SQ Sequence 17 BP; 5 A; 9 C; 3 G; 0 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 9.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 466 TGGGCTGGGGCCTGG 480
DB 17 TGGGCTGGGGCCTGG 3

RESULT 1448
ABN02217/c
ID ABN02217 standard; DNA; 17 BP.
XX
AC ABN02217;
XX
DT 29-MAY-2002 (first entry)
XX
DE Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:2209.
XX
KW Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
KW skeletal muscle disorder; amplicon; screening; ss.
XX
OS Homo sapiens.
XX
PN WO200192524-A2.
XX
PD 06-DEC-2001.
XX
PF 25-MAY-2001; 2001WO-US016981.
XX 26-MAY-2000; 2000US-0207456P.
XX 21-SEP-2000; 2000US-0234687P.
XX 27-SEP-2000; 2000US-0236359P.
XX 04-OCT-2000; 2000GB-00024263.
XX 30-JAN-2001; 2001WO-US000661.
XX 30-JAN-2001; 2001WO-US000662.
XX 30-JAN-2001; 2001WO-US000663.
XX 30-JAN-2001; 2001WO-US000664.

PR 30-JAN-2001; 2001WO-US000665.
 PR 30-JAN-2001; 2001WO-US000666.
 PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 30-JAN-2001; 2001WO-US000669.
 PR 30-JAN-2001; 2001WO-US000670.
 PR 05-FEB-2001; 2001US-0266860P.
 XX
 PA (AEOM-) AEOMICA INC.
 XX
 PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
 XX WPI; 2002-179446/23.
 DR
 XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
 PT or as specific biomolecule capture probes for surface-enhanced laser
 PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.
 XX
 PS Disclosure; SEQ ID NO 2209; 214pp; English.
 XX
 CC The present invention describes a human genome-derived myosin-like
 CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
 CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
 CC nucleic acids can be used as probes to detect, characterise and quantify
 CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
 CC provide initial substrates for the recombinant engineering of hGDMPLP-1
 CC protein variants having desired phenotypic improvements, and for
 CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
 CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
 CC -1 proteins, as standards in assays used to determine the concentration
 CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
 CC capture probes for surface-enhanced laser desorption/ionisation, as
 CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
 CC production, and in vaccines or for replacement therapy. The
 CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
 CC disorder associated with the expression of hGDMPLP-1, in particular heart
 CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
 CC The present sequence represents an oligomer used in the screening of the
 CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
 CC The sequence data for this patent did not form part of the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequence
 XX
 SQ Sequence 17 BP; 3 A; 2 C; 9 G; 3 T; 0 U; 0 Other;

 Query Match 0.6%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 9.3e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

 QY 1970 ACACGTGCTGCCCTC 1984
 |||||
 Db 17 ACACGTGCTGCCATC 3

 RESULT 1449
 ABN02744
 ID ABN02744 standard; DNA; 17 BP.
 XX
 AC ABN02744;
 XX
 DT 29-MAY-2002 (first entry)
 XX
 DE Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:2736.
 XX
 KW Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
 KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
 KW skeletal muscle disorder; amplicon; screening; ss.
 OS Homo sapiens.
 XX
 PN WO200192524-A2.
 XX
 PD 06-DEC-2001.

XX 25-MAY-2001; 2001WO-US016981.
 XX
 PR 26-MAY-2000; 2000US-0207456P.
 PR 21-SEP-2000; 2000US-0234687P.
 PR 27-SEP-2000; 2000US-0236359P.
 PR 04-OCT-2000; 2000GB-00024263.
 PR 30-JAN-2001; 2001WO-US000661.
 PR 30-JAN-2001; 2001WO-US000662.
 PR 30-JAN-2001; 2001WO-US000663.
 PR 30-JAN-2001; 2001WO-US000664.
 PR 30-JAN-2001; 2001WO-US000665.
 PR 30-JAN-2001; 2001WO-US000666.
 PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 30-JAN-2001; 2001WO-US000669.
 PR 05-FEB-2001; 2001WO-US000670.
 XX
 PA (AEOM-) AEOMICA INC.
 XX
 PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
 XX WPI; 2002-179446/23.
 DR
 XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
 PT or as specific biomolecule capture probes for surface-enhanced laser
 PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.
 XX
 PS Disclosure; SEQ ID NO 2736; 214pp; English.
 XX
 CC The present invention describes a human genome-derived myosin-like
 CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
 CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
 CC nucleic acids can be used as probes to detect, characterise and quantify
 CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
 CC provide initial substrates for the recombinant engineering of hGDMPLP-1
 CC protein variants having desired phenotypic improvements, and for
 CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
 CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
 CC -1 proteins, as standards in assays used to determine the concentration
 CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
 CC capture probes for surface-enhanced laser desorption/ionisation, as
 CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
 CC production, and in vaccines or for replacement therapy. The
 CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
 CC disorder associated with the expression of hGDMPLP-1, in particular heart
 CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
 CC The present sequence represents an oligomer used in the screening of the
 CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
 CC The sequence data for this patent did not form part of the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequence
 XX
 SQ Sequence 17 BP; 2 A; 6 C; 7 G; 2 T; 0 U; 0 Other;

 Query Match 0.6%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 9.3e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

 QY 1010 CAGCTGTGCGCCCTG 1024
 |||||
 Db 3 CAGCTGTGCGCCCTG 17

 RESULT 1450
 ABN08677
 ID ABN08677 standard; DNA; 17 BP.
 XX
 AC ABN08677;
 XX
 DT 29-MAY-2002 (first entry)
 XX

CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequence
 XX
 SQ Sequence 17 BP; 2 A; 6 C; 4 G; 5 T; 0 U; 0 Other;
 Query Match 0.6%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 9.3e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1013 CTGTGGCCCTGGATA 1027
 Db 2 CTGTGGCCCTGGATA 16
 RESULT 1452
 ABN02219/c
 ID ABN02219 standard; DNA; 17 BP.
 XX
 AC ABN02219;
 XX
 DT 29-MAY-2002 (first entry)
 XX
 DE Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:2211.
 XX
 KW Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
 KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
 KW skeletal muscle disorder; amplicon; screening; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200192524-A2.
 XX
 PD 06-DEC-2001.
 XX
 PF 25-MAY-2001; 2001WO-US016981.
 XX
 PR 26-MAY-2000; 2000US-0207456P.
 PR 21-SEP-2000; 2000US-0234687P.
 PR 27-SEP-2000; 2000US-0236359P.
 PR 04-OCT-2000; 2000GB-00024263.
 PR 30-JAN-2001; 2001WO-US000661.
 PR 30-JAN-2001; 2001WO-US000662.
 PR 30-JAN-2001; 2001WO-US000663.
 PR 30-JAN-2001; 2001WO-US000664.
 PR 30-JAN-2001; 2001WO-US000665.
 PR 30-JAN-2001; 2001WO-US000666.
 PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 30-JAN-2001; 2001WO-US000669.
 PR 30-JAN-2001; 2001WO-US000670.
 PR 05-FEB-2001; 2001US-0266860P.
 XX
 PA (ABOM-) ABOMICA INC.
 XX
 PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
 XX
 DR WPI; 2002-179446/23.
 XX
 PT New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
 PT or as specific biomolecule capture probes for surface-enhanced laser
 PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.
 XX
 PS Disclosure; SEQ ID NO 2211; 214pp; English.
 XX
 CC The present invention describes a human genome-derived myosin-like
 CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
 CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
 CC nucleic acids can be used as probes to detect, characterize and quantify
 CC hGDMPLP-1 nucleic acids in samples, as amplification substrates to
 CC provide initial substrates for the recombinant engineering of hGDMPLP-1
 CC protein variants having desired phenotypic improvements, and for
 CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
 CC used as immunogens to raise antibodies that specifically recognise hGDMPLP

CC -1 proteins, as standards in assays used to determine the concentration
 CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
 CC capture probes for surface-enhanced laser desorption ionisation, as
 CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
 CC production, and in vaccines or for replacement therapy. The
 CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
 CC disorder associated with the expression of hGDMPLP-1, in particular heart
 CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
 CC The present sequence represents an oligomer used in the screening of the
 CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
 CC The sequence data for this patent did not form part of the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequence
 XX
 SQ Sequence 17 BP; 3 A; 2 C; 9 G; 3 T; 0 U; 0 Other;
 Query Match 0.6%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 9.3e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1970 ACACCTGCTGCTGCTC 1984
 Db 15 ACACCTGCTGCTGCTC 1
 RESULT 1453
 ABN06572
 ID ABN06572 standard; DNA; 17 BP.
 XX
 AC ABN06572;
 XX
 DT 29-MAY-2002 (first entry)
 XX
 DE Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:6564.
 XX
 KW Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;
 KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
 KW skeletal muscle disorder; amplicon; screening; ss.
 XX
 OS Homo sapiens.
 XX
 PN WO200192524-A2.
 XX
 PD 06-DEC-2001.
 XX
 PF 25-MAY-2001; 2001WO-US016981.
 PR 26-MAY-2000; 2000US-0207456P.
 PR 21-SEP-2000; 2000US-0234687P.
 PR 27-SEP-2000; 2000US-0236359P.
 PR 04-OCT-2000; 2000GB-00024263.
 PR 30-JAN-2001; 2001WO-US000661.
 PR 30-JAN-2001; 2001WO-US000662.
 PR 30-JAN-2001; 2001WO-US000663.
 PR 30-JAN-2001; 2001WO-US000664.
 PR 30-JAN-2001; 2001WO-US000665.
 PR 30-JAN-2001; 2001WO-US000666.
 PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 30-JAN-2001; 2001WO-US000669.
 PR 05-FEB-2001; 2001US-0266860P.
 XX
 PA (ABOM-) ABOMICA INC.
 XX
 PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
 XX
 DR WPI; 2002-179446/23.
 XX
 PT New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
 PT or as specific biomolecule capture probes for surface-enhanced laser
 PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.
 XX

PS Disclosure; SEQ ID NO 6564; 214pp; English.

XX The present invention describes a human genome-derived myosin-like

CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-1

CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1

CC nucleic acids can be used as probes to detect, characterise and quantify

CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to

CC provide initial substrates for the recombinant engineering of hGDMPLP-1

CC protein variants having desired phenotypic improvements, and for

CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be

CC used as immunogens to raise antibodies that specifically recognise hGDMPLP

CC -1 proteins, as standards in assays used to determine the concentration

CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule

CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1

CC production, and in vaccines or for replacement therapy. The

CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a

CC disorder associated with the expression of hGDMPLP-1, in particular heart

CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.

CC The present sequence represents an oligomer used in the screening of the

CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.

CC The sequence data for this patent did not form part of the printed

CC specification, but was obtained in electronic format directly from WIPO

CC at ftp.wipo.int/pub/published_pct_sequence

XX Sequence 17 BP; 2 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

SQ

Query Match 0.6%; Score 13.4; DB 1; Length 17;

Best Local Similarity 93.3%; Pred. No. 9.3e+02;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1013 CTCTGGCCCTGGATA 1027

DB 1 CTCTGGCCCTGGATA 15

RESULT 1454

ABN07094

ID AEN07094 standard; DNA; 17 BP.

AC AEN07094;

XX 29-MAY-2002 (first entry)

DT Human GDMPLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:7086.

DE Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;

KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;

KW skeletal muscle disorder; amplicon; screening; ss.

XX Homo sapiens.

OS WO200192524-A2.

PN 06-DEC-2001.

XX 25-MAY-2001; 2001WO-US016981.

XX 26-MAY-2000; 2000US-0207456P.

PR 21-SEP-2000; 2000US-0234687P.

PR 27-SEP-2000; 2000US-0236359P.

PR 04-OCT-2000; 2000GB-00024263.

PR 30-JAN-2001; 2001WO-US000661.

PR 30-JAN-2001; 2001WO-US000662.

PR 30-JAN-2001; 2001WO-US000663.

PR 30-JAN-2001; 2001WO-US000664.

PR 30-JAN-2001; 2001WO-US000665.

PR 30-JAN-2001; 2001WO-US000666.

PR 30-JAN-2001; 2001WO-US000667.

PR 30-JAN-2001; 2001WO-US000668.

PR 30-JAN-2001; 2001WO-US000669.

PR 30-JAN-2001; 2001WO-US000670.

PR 05-FEB-2001; 2001US-0266860P.

PS Disclosure; SEQ ID NO 7086; 214pp; English.

XX The present invention describes a human genome-derived myosin-like

CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-1

CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1

CC nucleic acids can be used as probes to detect, characterise and quantify

CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to

CC provide initial substrates for the recombinant engineering of hGDMPLP-1

CC protein variants having desired phenotypic improvements, and for

CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be

CC used as immunogens to raise antibodies that specifically recognise hGDMPLP

CC -1 proteins, as standards in assays used to determine the concentration

CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule

CC capture probes for surface-enhanced laser desorption/ionisation, as

CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1

CC production, and in vaccines or for replacement therapy. The

CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a

CC disorder associated with the expression of hGDMPLP-1, in particular heart

CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.

CC The present sequence represents an oligomer used in the screening of the

CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.

CC The sequence data for this patent did not form part of the printed

CC specification, but was obtained in electronic format directly from WIPO

CC at ftp.wipo.int/pub/published_pct_sequence

XX Sequence 17 BP; 5 A; 3 C; 7 G; 2 T; 0 U; 0 Other;

SQ

Query Match 0.6%; Score 13.4; DB 1; Length 17;

Best Local Similarity 93.3%; Pred. No. 9.3e+02;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1457 CCAAGGAGGAGAGC 1471

DB 1 CCAAGGAGGAGAGC 15

RESULT 1455

ABN02745

ID AEN02745 standard; DNA; 17 BP.

AC AEN02745;

XX 29-MAY-2002 (first entry)

DT Human GDMPLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:2737.

DE Human; genome-derived myosin-like protein 1; GDMPLP-1; hGDMPLP-1; heart;

KW muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;

KW skeletal muscle disorder; amplicon; screening; ss.

XX Homo sapiens.

OS WO200192524-A2.

PN 06-DEC-2001.

XX 25-MAY-2001; 2001WO-US016981.

XX 26-MAY-2000; 2000US-0207456P.

PR 21-SEP-2000; 2000US-0234687P.

PR 27-SEP-2000; 2000US-0236359P.

PR 04-OCT-2000; 2000GB-00024263.

PR 30-JAN-2001; 2001WO-US000661.

PR 30-JAN-2001; 2001WO-US000662.

PR 30-JAN-2001; 2001WO-US000663.

PR 30-JAN-2001; 2001WO-US000664.

PR 30-JAN-2001; 2001WO-US000665.

PR 30-JAN-2001; 2001WO-US000666.

PR 30-JAN-2001; 2001WO-US000667.

PR 30-JAN-2001; 2001WO-US000668.

PR 30-JAN-2001; 2001WO-US000669.

PR 30-JAN-2001; 2001WO-US000670.

PR 05-FEB-2001; 2001US-0266860P.

PR 30-JAN-2001; 2001WO-US000661.
 PR 30-JAN-2001; 2001WO-US000662.
 PR 30-JAN-2001; 2001WO-US000663.
 PR 30-JAN-2001; 2001WO-US000664.
 PR 30-JAN-2001; 2001WO-US000665.
 PR 30-JAN-2001; 2001WO-US000666.
 PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 30-JAN-2001; 2001WO-US000669.
 PR 30-JAN-2001; 2001WO-US000670.
 PR 05-FEB-2001; 2001US-0268660P.
 XX (AEOM-) AECOMICA INC.
 PI Gu Y, Ji Y, Penn SG, Hanzel DK, Rank DR, Chen W, Shannon ME;
 XX WPI; 2002-179446/23.
 DR
 XX New polypeptide, for raising antibodies that recognize hGDMPLP-1 proteins,
 PT or as specific biomolecule capture probes for surface-enhanced laser
 PT desorption ionization, comprises human myosin-like protein hGDMPLP-1.
 XX
 PS Disclosure; SEQ ID NO 2737; 214pp; English.
 XX
 CC The present invention describes a human genome-derived myosin-like
 CC protein 1 (hGDMPLP-1). The protein and polynucleotide sequences of hGDMPLP-
 CC 1 can be used in gene therapy and vaccine production. The hGDMPLP-1
 CC nucleic acids can be used as probes to detect, characterize and quantify
 CC hGDMPLP-1 nucleic acids in samples, as amplification substrates, to
 CC provide initial substrates for the recombinant engineering of hGDMPLP-1
 CC protein variants having desired phenotypic improvements, and for
 CC expressing the proteins. The hGDMPLP-1 proteins or polypeptides may be
 CC used as immunogens to raise antibodies that specifically recognise hGDMPLP
 CC -1 proteins, as standards in assays used to determine the concentration
 CC and/or amount specifically of hGDMPLP proteins, as specific biomolecule
 CC capture probes for surface-enhanced laser desorption/ionisation, as
 CC therapeutic supplement in patients having specific deficiency in hGDMPLP-1
 CC production, and in vaccines or for replacement therapy. The
 CC polynucleotide sequences encoding hGDMPLP-1 may be used for diagnosing a
 CC disorder associated with the expression of hGDMPLP-1, in particular heart
 CC and skeletal muscle disorders. hGDMPLP-1 is localised to chromosome 22.
 CC The present sequence represents an oligomer used in the screening of the
 CC hGDMPLP-1 sequence in the exemplification of the present invention. N.B.
 CC The sequence data for this patent did not form part of the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequence
 XX
 SQ Sequence 17 BP; 2 A; 5 C; 8 G; 2 T; 0 U; 0 Other;
 Query Match 0.6%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 9.3e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 Qy 1010 CAGCTGTGGCCCTGG 1024
 Db ||||| ||||| |||||
 2 CAGCTGAGGCCCTGG 16
 RESULT 1456
 ABV89534
 ID ABV89534 standard; DNA; 17 BP.
 XX
 AC ABV89534;
 XX
 XX 23-DEC-2002 (first entry)
 DT Human POSHL1 scanning oligonucleotide SEQ ID NO 247.
 DE Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
 XX Rho GTPase; signal transduction; gene expression; cancer; vaccine;
 KW gene therapy; transgenic; ss.
 XX
 OS Homo sapiens.

XX EP1239051-A2.
 PN
 XX 11-SEP-2002.
 PD
 XX 28-JAN-2002; 2002EP-00001165.
 PF
 XX 30-JAN-2001; 2001WO-US000663.
 PR 30-JAN-2001; 2001WO-US000664.
 PR 30-JAN-2001; 2001WO-US000665.
 PR 30-JAN-2001; 2001WO-US000666.
 PR 30-JAN-2001; 2001WO-US000667.
 PR 30-JAN-2001; 2001WO-US000668.
 PR 30-JAN-2001; 2001WO-US000669.
 PR 30-JAN-2001; 2001WO-US000670.
 PR 23-MAY-2001; 2001US-00864761.
 PR 10-OCT-2001; 2001US-0328205P.
 XX (AEOM-) AECOMICA INC.
 PA Shannon M;
 XX WPI; 2002-684061/74.
 DR
 XX Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
 PT -1, useful for treating disorders associated with decreased expression or
 PT activity of human POSHL.
 XX
 PS Example 2; SEQ ID NO 247; 60pp + Sequence Listing; English.
 XX
 CC The invention relates to an isolated SH3 domain (POSH)-like signalling
 CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
 CC acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),
 CC (S1) having 9% deviations, especially conservative substitutions or a
 CC fragment of the sequences comprising at least 8 contiguous amino acids.
 CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
 CC adaptor protein that interacts with Rho family small GTPases as well as
 CC downstream components of the signal transduction pathway (I) is useful
 CC for identifying a specific binding partner. (I) and nucleic acids (II)
 CC encoding (I) are useful for diagnosing, monitoring disease and treating
 CC caused by altered expression of human POSHL1 including diagnosing and
 CC treating cancer, they useful in the development of vaccines and (II) is
 CC useful in gene therapy. (II) is useful for constructing microarrays which
 CC are useful for measuring and for surveying gene expression and creating
 CC transgenic non-human animals capable of producing the proteins. The
 CC present sequence is that of a scanning oligonucleotide useful in examples
 CC of the invention. Note: The present sequence did not form part of the
 CC printed specification, but is based on sequence information supplied to
 CC Derwent by the European Patent Office
 XX
 SQ Sequence 17 BP; 7 A; 0 C; 4 G; 6 T; 0 U; 0 Other;
 Query Match 0.6%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 9.3e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 Qy 2068 TTTGTAATAAATCG 2082
 Db ||||| ||||| |||||
 3 TTTGAAATAAATCG 17
 RESULT 1457
 ABV89536
 ID ABV89536 standard; DNA; 17 BP.
 XX
 AC ABV89536;
 XX
 XX 23-DEC-2002 (first entry)
 DT Human POSHL1 scanning oligonucleotide SEQ ID NO 249.
 XX Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
 DE Rho GTPase; signal transduction; gene expression; cancer; vaccine;
 XX
 KW Homo sapiens.

KW gene therapy; transgenic; ss.
XX
OS Homo sapiens.
XX
PN EP1239051-A2.
XX
PD 11-SEP-2002.
XX
PF 28-JAN-2002; 2002EP-00001165.
XX
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 23-MAY-2001; 2001US-00864761.
PR 10-OCT-2001; 2001US-0328205P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Shannon M;
XX
DR WPI; 2002-684061/74.
XX
PT Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
PT -1, useful for treating disorders associated with decreased expression or
PT activity of human POSHL1.
XX
PS Example 2; SEQ ID NO 249; 60pp + Sequence Listing; English.
XX
CC The invention relates to an isolated SH3 domain (POSH)-like signalling
CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC acids (SI, ABB83999), a sequence having 65% sequence identity to (SI),
CC (SI) having 95% deviations, especially conservative substitutions or a
CC fragment of the sequences comprising at least 8 contiguous amino acids.
CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC adaptor protein that interacts with Rho family small GTPases as well as
CC downstream components of the signal transduction pathway. (I) is useful
CC for identifying a specific binding partner. (I) and nucleic acids (II)
CC encoding (I) are useful for diagnosing, monitoring disease and treating
CC caused by altered expression of human POSHL1 including diagnosing and
CC treating cancer, they are useful in the development of vaccines and (II) is
CC useful in gene therapy. (II) is useful for constructing microarrays which
CC are useful for measuring and for surveying gene expression and creating
CC transgenic non-human animals capable of producing the proteins. The
CC present sequence is that of a scanning oligonucleotide useful in examples
CC of the invention. Note: The present sequence did not form part of the
CC printed specification, but is based on sequence information supplied to
CC Derwent by the European Patent Office
XX
SQ Sequence 17 BP; 8 A; 0 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 9.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2068 TTGTGTAATAAATGG 2082
DB 1 TTTGAAATAAATGG 15

RESULT 1458
ABV89535
ID ABV89535 standard; DNA; 17 BP.
AC
XX ABV89535;
XX
DT 23-DEC-2002 (first entry)
XX
XX Human POSHL1 scanning oligonucleotide SEQ ID NO 248.
DE

XX
KW Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
KW Rho GTPase; signal transduction; gene expression; cancer; vaccine;
KW gene therapy; transgenic; ss.
XX
OS Homo sapiens.
XX
PN EP1239051-A2.
XX
PD 11-SEP-2002.
XX
PF 28-JAN-2002; 2002EP-00001165.
XX
PR 30-JAN-2001; 2001WO-US000663.
PR 30-JAN-2001; 2001WO-US000664.
PR 30-JAN-2001; 2001WO-US000665.
PR 30-JAN-2001; 2001WO-US000666.
PR 30-JAN-2001; 2001WO-US000667.
PR 30-JAN-2001; 2001WO-US000668.
PR 30-JAN-2001; 2001WO-US000669.
PR 30-JAN-2001; 2001WO-US000670.
PR 23-MAY-2001; 2001US-00864761.
PR 10-OCT-2001; 2001US-0328205P.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Shannon M;
XX
DR WPI; 2002-684061/74.
XX
PT Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
PT -1, useful for treating disorders associated with decreased expression or
PT activity of human POSHL1.
XX
PS Example 2; SEQ ID NO 248; 60pp + Sequence Listing; English.
XX
CC The invention relates to an isolated SH3 domain (POSH)-like signalling
CC protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino
CC acids (SI, ABB83999), a sequence having 65% sequence identity to (SI),
CC (SI) having 95% deviations, especially conservative substitutions or a
CC fragment of the sequences comprising at least 8 contiguous amino acids.
CC Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
CC adaptor protein that interacts with Rho family small GTPases as well as
CC downstream components of the signal transduction pathway. (I) is useful
CC for identifying a specific binding partner. (I) and nucleic acids (II)
CC encoding (I) are useful for diagnosing, monitoring disease and treating
CC caused by altered expression of human POSHL1 including diagnosing and
CC treating cancer, they are useful in the development of vaccines and (II) is
CC useful in gene therapy. (II) is useful for constructing microarrays which
CC are useful for measuring and for surveying gene expression and creating
CC transgenic non-human animals capable of producing the proteins. The
CC present sequence is that of a scanning oligonucleotide useful in examples
CC of the invention. Note: The present sequence did not form part of the
CC printed specification, but is based on sequence information supplied to
CC Derwent by the European Patent Office
XX
SQ Sequence 17 BP; 8 A; 0 C; 3 G; 6 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 9.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2068 TTGTGTAATAAATGG 2082
DB 2 TTTGAAATAAATGG 16

RESULT 1459
ABK55719
ID ABK55719 standard; RNA; 17 BP.
XX
XX ABK55719;
XX

```

DT XX 02-JUL-2002 (first entry)
DE XX Human CLCA1 gene enzymatic nucleic acid #90.
KW XX Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;
KW XX antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;
KW XX chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;
KW XX oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
KW XX acetylcysteine.
OS XX Homo sapiens.
XX XX
XX XX WO200211674-A2.
XX XX 14-FEB-2002.
XX XX
XX XX 09-AUG-2001; 2001WO-US024970.
XX XX
XX XX 09-AUG-2000; 2000US-0224383P.
XX XX
XX XX (RIBO-) RIBOZYME PHARM INC.
XX XX (SYNT ) SYNTEX USA LLC.
XX XX (THOM/) THOMPSON J.
XX XX
XX XX Thompson J, Mcswiggen J, Mckenzie T, Ayers D, Szymkowski DE;
XX XX Grupe A;
XX XX WPI; 2002-217145/27.
XX XX
XX XX Enzymatic polynucleotide that down regulates expression of chloride
XX XX channel calcium activated gene, useful for treating Chronic obstructive
XX XX pulmonary disease (COPD), chronic bronchitis and asthma.
XX XX
XX XX Claim 4; Page 54; 152pp; English.
XX XX
XX XX The invention relates to enzymatic nucleic acid molecules that down
XX XX regulate expression of chloride channel calcium activated 1 (CLCA1) genes
XX XX by cleaving RNA derived from the genes. The nucleic acid sequences are
XX XX useful as pharmaceutical agents for treating conditions such as chronic
XX XX obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic
XX XX fibrosis, obstructive bowel syndrome and any other diseases or conditions
XX XX that are related to or will respond to the levels of CLCA1 in a cell or
XX XX tissue. The sequences are useful for reducing CLCA1 activity in a cell,
XX XX hence, are useful for treatment of a patient having a condition
XX XX associated with the level of CLCA1, where the invention further comprises
XX XX the use of one or more therapies under conditions suitable for the
XX XX treatment, for example, oxygen therapy, bronchodilators, corticosteroids,
XX XX antibiotics, vaccinations, acetylcysteine and mucokinetic agents. The
XX XX nucleic acids of the invention are also used as diagnostic tools to
XX XX examine genetic drift and mutations within diseased cells or to detect
XX XX the presence of CLCA1 RNA in a cell. This sequence represents an
XX XX enzymatic nucleic acid molecule of the invention
XX XX
XX XX Sequence 17 BP; 4 A; 5 C; 5 G; 0 T; 3 U; 0 Other;
XX XX
XX XX Query Match 0.6%; Score 13.4; DB 1; Length 17;
XX XX Best Local Similarity 73.3%; Pred. No. 9.3e+02;
XX XX Matches 11; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1843 ACATTCAGAGGGG 1857
DB 2 ACCUUCUAGAGGGG 16

RESULT 1460
ABK57541
ID ABK57541 standard; RNA; 17 BP.
XX
XX ABK57541;
XX
XX 02-JUL-2002 (first entry)
XX
XX Human CLCA1 gene enzymatic nucleic acid #1912.

```

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XX
XX
XX KW Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;
XX KW antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;
XX KW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;
XX KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
XX KW acetylcysteine.
XX OS Homo sapiens.
XX XX
XX XX WO200211674-A2.
XX XX 14-FEB-2002.
XX XX
XX XX 09-AUG-2001; 2001WO-US024970.
XX XX
XX XX 09-AUG-2000; 2000US-0224383P.
XX XX
XX XX (RIBO-) RIBOZYME PHARM INC.
XX XX (SYNT ) SYNTEX USA LLC.
XX XX (THOM/) THOMPSON J.
XX XX
XX XX Thompson J, Mcswiggen J, Mckenzie T, Ayers D, Szymkowski DE;
XX XX Grupe A;
XX XX WPI; 2002-217145/27.
XX XX
XX XX Enzymatic polynucleotide that down regulates expression of chloride
XX XX channel calcium activated gene, useful for treating Chronic obstructive
XX XX pulmonary disease (COPD), chronic bronchitis and asthma.
XX XX
XX XX Claim 4; Page 128; 152pp; English.
XX XX
XX XX The invention relates to enzymatic nucleic acid molecules that down
XX XX regulate expression of chloride channel calcium activated 1 (CLCA1) genes
XX XX by cleaving RNA derived from the genes. The nucleic acid sequences are
XX XX useful as pharmaceutical agents for treating conditions such as chronic
XX XX obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic
XX XX fibrosis, obstructive bowel syndrome and any other diseases or conditions
XX XX that are related to or will respond to the levels of CLCA1 in a cell or
XX XX tissue. The sequences are useful for reducing CLCA1 activity in a cell,
XX XX hence, are useful for treatment of a patient having a condition
XX XX associated with the level of CLCA1, where the invention further comprises
XX XX the use of one or more therapies under conditions suitable for the
XX XX treatment, for example, oxygen therapy, bronchodilators, corticosteroids,
XX XX antibiotics, vaccinations, acetylcysteine and mucokinetic agents. The
XX XX nucleic acids of the invention are also used as diagnostic tools to
XX XX examine genetic drift and mutations within diseased cells or to detect
XX XX the presence of CLCA1 RNA in a cell. This sequence represents an
XX XX enzymatic nucleic acid molecule of the invention
XX XX
XX XX Sequence 17 BP; 4 A; 5 C; 5 G; 0 T; 3 U; 0 Other;
XX XX
XX XX Query Match 0.6%; Score 13.4; DB 1; Length 17;
XX XX Best Local Similarity 73.3%; Pred. No. 9.3e+02;
XX XX Matches 11; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 1843 ACATTCAGAGGGG 1857
DB 1 ACCUUCUAGAGGGG 15

RESULT 1461
ABK56259
ID ABK56259 standard; RNA; 17 BP.
XX
XX ABK56259;
XX
XX 02-JUL-2002 (first entry)
XX
XX Human CLCA1 gene enzymatic nucleic acid #630.
XX
XX Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic;
XX KW antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma;

```

KW chronic bronchitis; cystic fibrosis; obstructive bowel syndrome;
 KW oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
 KW acetylcysteine.
 XX
 OS Homo sapiens.
 XX
 PN WO200211674-A2.
 XX
 PD 14-FEB-2002.
 XX
 PF 09-AUG-2001; 2001WO-US024970.
 XX
 PR 09-AUG-2000; 2000US-0224383P.
 XX
 PA (RIBO-) RIBOZYME PHARM INC.
 PA (SYNT) SYNTAX USA LLC.
 PA (THOM/) THOMPSON J.
 XX
 PI Thompson J, Mcswiggen J, Mckenzie T, Ayers D, Szymkowski DE;
 PI Grupe A;
 XX
 DR WPI; 2002-217145/27.
 XX
 XX Enzymatic polynucleotide that down regulates expression of chloride
 PT channel calcium activated gene, useful for treating Chronic obstructive
 PT pulmonary disease (COPD), chronic bronchitis and asthma.
 XX
 PS Claim 4; Page 65; 152pp; English.
 XX
 CC The invention relates to enzymatic nucleic acid molecules that down
 CC regulate expression of chloride channel calcium activated 1 (CLCA1) genes
 CC by cleaving RNA derived from the genes. The nucleic acid sequences are
 CC useful as pharmaceutical agents for treating conditions such as chronic
 CC obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic
 CC fibrosis, obstructive bowel syndrome and any other diseases or conditions
 CC that are related to or will respond to the levels of CLCA1 in a cell or
 CC tissue. The sequences are useful for reducing CLCA1 activity in a cell,
 CC hence, are useful for treatment of a patient having a condition
 CC associated with the level of CLCA1, where the invention further comprises
 CC the use of one or more therapies under conditions suitable for the
 CC treatment, for example, oxygen therapy, bronchodilators, corticosteroids,
 CC antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The
 CC nucleic acids of the invention are also used as diagnostic tools to
 CC examine genetic drift and mutations within diseased cells or to detect
 CC the presence of CLCA1 RNA in a cell. This sequence represents an
 CC enzymatic nucleic acid molecule of the invention
 XX
 SQ Sequence 17 BP; 4 A; 4 C; 5 G; 0 T; 4 U; 0 Other;
 Query Match 0.6%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 73.3%; Pred. No. 9.3e+02;
 Matches 11; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
 QY 1843 ACATTCTAGAGGGG 1857
 || :||:|||||
 DB 3 ACCUUCUAGAGGGG 17
 RESULT 1462
 ACC53299/C
 ID ACC53299 standard; DNA; 17 BP.
 XX
 AC ACC53299;
 XX
 DT 27-JUN-2003 (first entry)
 XX
 DE Human tumour suppressor sequence #2066.
 XX
 ss; tumour suppressor; antitumour; cytostatic; tumour suppression;
 KW tumour regression; apoptosis; virus resistance; diagnosis;
 KW cellular degeneration.
 XX
 OS Homo sapiens.

XX FR2826373-A1.
 PN
 XX
 PD 27-DEC-2002.
 XX
 PF 20-JUN-2001; 2001FR-00008139.
 XX
 PR 20-JUN-2001; 2001FR-00008139.
 XX
 PA (MOLE-) MOLECULAR ENGINES LAB SA.
 XX
 PI Tuijnder M, Telerman A, Amson R;
 XX
 DR WPI; 2003-250498/25.
 XX
 XX New nucleic acid sequences associated with tumor suppression, regression,
 PT apoptosis or virus resistance are useful to diagnose and treat viral
 PT disease, development of tumor cells and cell degeneration.
 XX
 XX Claim 1; Page 517; 798pp; French.
 XX
 CC This sequence represents an isolated nucleic acid sequence associated
 CC with tumour suppression or regression, apoptosis or virus resistance. The
 CC invention relates to these sequences or sequences having at least 80%
 CC identity to them, and polypeptides encoded by the sequences or
 CC polypeptides having 80% identity to the polypeptide sequences. The
 CC invention is used to diagnose or treat viral disease or disease
 CC characterized by development of tumour cells or cellular degeneration
 XX
 SQ Sequence 17 BP; 5 A; 2 C; 5 G; 5 T; 0 U; 0 Other;
 Query Match 0.6%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 9.3e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1270 AAGCGCATCTCGATC 1284
 |||||
 DB 15 AAGCTCATCTCGATC 1
 RESULT 1463
 ACC51628/C
 ID ACC51628 standard; DNA; 17 BP.
 XX
 AC ACC51628;
 XX
 DT 27-JUN-2003 (first entry)
 XX
 DE Human tumour suppressor sequence #395.
 XX
 ss; tumour suppressor; antitumour; cytostatic; tumour suppression;
 KW tumour regression; apoptosis; virus resistance; diagnosis;
 KW cellular degeneration.
 XX
 OS Homo sapiens.
 XX
 PN FR2826373-A1.
 XX
 PD 27-DEC-2002.
 XX
 PF 20-JUN-2001; 2001FR-00008139.
 XX
 PR 20-JUN-2001; 2001FR-00008139.
 XX
 PA (MOLE-) MOLECULAR ENGINES LAB SA.
 XX
 PI Tuijnder M, Telerman A, Amson R;
 XX
 DR WPI; 2003-250498/25.
 XX
 XX New nucleic acid sequences associated with tumor suppression, regression,
 PT apoptosis or virus resistance are useful to diagnose and treat viral
 PT disease, development of tumor cells and cell degeneration.
 XX

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XX PS Claim 1; Page 131; 798pp; French.
XX CC This sequence represents an isolated nucleic acid sequence associated
CC with tumour suppression or regression, apoptosis or virus resistance. The
CC invention relates to these sequences or sequences having at least 80%
CC identity to them, and polypeptides encoded by the sequences or
CC polypeptides having 80% identity to the polypeptide sequences. The
CC invention is used to diagnose or treat viral disease or disease
CC characterized by development of tumour cells or cellular degeneration
XX SQ Sequence 17 BP; 5 A; 4 C; 5 G; 3 T; 0 U; 0 Other;

Query Match          0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 9.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1949 TGGCCTCAAGTCAGC 1963
DB 15 TGGCCTCAAGTCATC 1

RESULT 1464
ACCS3665
ID ACCS3665 standard; DNA; 17 BP.
XX AC ACCS3665;
XX DT 27-JUN-2003 (first entry)
XX DE Human tumour suppressor sequence #2432.
XX KW ss: tumour suppressor; antitumour; cytostatic; tumour suppression;
XX KW tumour regression; apoptosis; virus resistance; diagnosis;
XX KW cellular degeneration.
XX OS Homo sapiens.
XX PN FR2826373-A1.
XX PD 27-DEC-2002.
XX PF 20-JUN-2001; 2001FR-00008139.
XX PR 20-JUN-2001; 2001FR-00008139.
XX PA (MOLE-) MOLECULAR ENGINES LAB SA.
XX PI Tuijnder M, Telerman A, Amson R;
XX DR WPI; 2003-250498/25.
XX CC New nucleic acid sequences associated with tumor suppression, regression,
XX PT apoptosis or virus resistance are useful to diagnose and treat viral
XX PT disease, development of tumor cells and cell degeneration.
XX PS Claim 1; Page 602; 798pp; French.
XX CC This sequence represents an isolated nucleic acid sequence associated
XX CC with tumour suppression or regression, apoptosis or virus resistance. The
XX CC invention relates to these sequences or sequences having at least 80%
XX CC identity to them, and polypeptides encoded by the sequences or
XX CC polypeptides having 80% identity to the polypeptide sequences. The
XX CC invention is used to diagnose or treat viral disease or disease
XX CC characterized by development of tumour cells or cellular degeneration
XX SQ Sequence 17 BP; 2 A; 4 C; 2 G; 9 T; 0 U; 0 Other;

Query Match          0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 9.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1585 TCTATTCTCTGTGT 1599
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DB 3 TCTATTCTCTGTCT 17

RESULT 1465
ACD00536
ID ACD00536 standard; DNA; 17 BP.
XX AC ACD00536;
XX DT 28-JUL-2003 (first entry)
XX DE G-protein coupled receptor GPCR-A-1 analysis oligonucleotide #1009.
XX KW Human; G-protein coupled receptor; GPCR-A-1; cancer; tumour;
XX KW G-Protein-Agonist; G-Protein-Antagonist; gene therapy; cytostatic; ss.
XX OS Homo sapiens.
XX PN WO2003031621-A2.
XX PD 17-APR-2003.
XX PF 11-OCT-2002; 2002WO-US032599.
XX PR 12-OCT-2001; 2001US-0329000P.
XX PA (AMSH ) AMERSHAM BIOSCIENCES SV CORP.
XX PI Zhang J;
XX DR WPI; 2003-381720/36.
XX CC New GPCR-A-1 nucleic acid and polypeptide, useful for diagnosing,
XX PT investigating and/or treating disorders associated with aberrant
XX PT expression or activity of GPCR-A-1, such as tumors and cancers.
XX PS Example 2; SEQ ID NO 1033; 156pp; English.
XX CC The invention describes an isolated nucleic acid encoding a G protein
XX CC coupled receptor (GPCR), mutations of which cause cancer, comprising a
XX CC 225 or 1921 base pair sequence, or their degenerate variants, encoding a
XX CC 409 residue amino acid sequence, all given in the specification, with or
XX CC without conservative amino acid substitutions, or complements of the
XX CC sequence of them. The encoding nucleic acid is not more than 100 kbase in
XX CC length. The methods and compositions of the present invention are useful
XX CC for diagnosing, investigating and/or treating disorders associated with
XX CC aberrant expression or activity of GPCR-A-1, such as tumours and cancers.
XX CC This sequence represents an oligonucleotide used to analyse the gene
XX CC encoding human G-protein coupled receptor GPCR-A-1
XX SQ Sequence 17 BP; 8 A; 1 C; 3 G; 5 T; 0 U; 0 Other;

Query Match          0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 9.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 715 AAAGGCAAGTATTAT 729
DB 1 AAAGGCAAGTATTAT 15

RESULT 1466
ACD00533
ID ACD00533 standard; DNA; 17 BP.
XX AC ACD00533;
XX DT 28-JUL-2003 (first entry)
XX KW G-protein coupled receptor GPCR-A-1 analysis oligonucleotide #1006.
XX DE Human; G-protein coupled receptor; GPCR-A-1; cancer; tumour;
```

KW G-Protein-Agonist; G-Protein-Antagonist; gene therapy; cytostatic; ss.
 XX Homo sapiens.
 OS
 XX WO2003031621-A2.
 PN
 XX 17-APR-2003.
 PD
 XX
 PF 11-OCT-2002; 2002WO-US032599.
 XX
 PR 12-OCT-2001; 2001US-0329000P.
 XX
 PA (AMSH) AMERSHAM BIOSCIENCES SV CORP.
 XX
 PI Zhang J;
 XX
 DR WPI; 2003-381720/36.
 XX
 XX New GPCR-A-1 nucleic acid and polypeptide, useful for diagnosing,
 PT investigating and/or treating disorders associated with aberrant
 PT expression or activity of GPCR-A-1, such as tumors and cancers.
 XX
 PS Example 2; SEQ ID NO 1030; 156pp; English.
 XX
 CC The invention describes an isolated nucleic acid encoding a G protein
 CC coupled receptor (GPCR), mutations of which cause cancer, comprising a
 CC 2225 or 1921 base pair sequence, or their degenerate variants, encoding a
 CC 409 residue amino acid sequence, all given in the specification, with or
 CC without conservative amino acid substitutions, or complements of the
 CC sequence of them. The encoding nucleic acid is not more than 100 kbase in
 CC length. The methods and compositions of the present invention are useful
 CC for diagnosing, investigating and/or treating disorders associated with
 CC aberrant expression or activity of GPCR-A-1, such as tumors and cancers.
 CC This sequence represents an oligonucleotide used to analyse the gene
 CC encoding human G-protein coupled receptor GPCR-A-1
 XX
 SQ Sequence 17 BP; 9 A; 2 C; 2 G; 4 T; 0 U; 0 Other;
 Query Match 0.6%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 9.3e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 714 CAAAGCAAGTATTA 728
 DB |||||
 3 CAAAGCAAGTATTA 17
 RESULT 1467
 ABT35447
 ID ABT35447 standard; DNA; 17 BP.
 XX
 AC ABT35447;
 XX
 DT 12-JUN-2003 (first entry)
 XX
 DE Tumour suppression related human fukutin oligo SEQ ID No 1084.
 XX
 KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
 KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
 KW schizophrenia; protein chip; gene therapy; tumour suppression;
 KW human fukutin; ds.
 XX
 OS Homo sapiens.
 XX
 XX WO2003025175-A2.
 PN
 XX 27-MAR-2003.
 PD
 XX 17-SEP-2002; 2002WO-IB004208.
 PF
 XX 17-SEP-2001; 2001FR-00011978.
 PR
 XX (MOLE-) MOLECULAR ENGINES LAB.
 PA
 PI Telerman A, Amson R, Tuijnder M;

XX Telerman A, Amson R, Tuijnder M;
 XX WPI; 2003-313353/30.
 XX
 PT New isolated nucleic acid, useful for treating viral diseases associated
 PT with tumors and cell degeneration, also related polypeptides, antibodies
 PT and transfected cells.
 XX
 PS Disclosure; Page 159; 720pp; French.
 XX
 CC The invention relates to a novel isolated 17 mer nucleic acid sequence,
 CC given in the specification, a sequence containing at least 15 consecutive
 CC nucleotides from the 17 mer sequence, a sequence with, after optimal
 CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
 CC hybridizes to them under highly stringent conditions, or the complement
 CC of any of them, or the corresponding RNA. The novel isolated nucleic
 CC acids of the invention are useful as probes and primers for detecting,
 CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
 CC component of a gene chip, in vitro as (anti)sense reagents, and for
 CC production of recombinant polypeptides. Any of the nucleic acids,
 CC polypeptides, vectors containing the nucleic acids, cells containing the
 CC vector or antibodies directed against the polypeptides are useful for
 CC preparation of pharmaceuticals for prevention and/or treatment of viral
 CC diseases that are characterised by development of tumours or cell
 CC degeneration, specifically cancer but also Alzheimer's disease and
 CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
 CC patient samples is useful for diagnosis and/or prognosis of these
 CC diseases. The polypeptides can also be used to generate antibodies, and
 CC both the polypeptide and antibodies are useful as components of protein
 CC chips. The nucleic acid sequences of the invention can be used in gene
 CC therapy. This polynucleotide sequence represents a tumour suppression
 CC related human fukutin oligonucleotide of the invention
 XX
 SQ Sequence 17 BP; 7 A; 5 C; 2 G; 3 T; 0 U; 0 Other;
 Query Match 0.6%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 9.3e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1085 TCAAGCTCCACATCA 1099
 DB |||||
 3 TCAAGCTACACATCA 17
 RESULT 1468
 ABT39790
 ID ABT39790 standard; DNA; 17 BP.
 XX
 AC ABT39790;
 XX
 DT 12-JUN-2003 (first entry)
 XX
 DE Tumour suppression related human fukutin oligo SEQ ID No 5427.
 XX
 KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
 KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
 KW schizophrenia; protein chip; gene therapy; tumour suppression;
 KW human fukutin; ds.
 XX
 OS Homo sapiens.
 XX
 XX WO2003025175-A2.
 PN
 XX 27-MAR-2003.
 PD
 XX 17-SEP-2002; 2002WO-IB004208.
 PF
 XX 17-SEP-2001; 2001FR-00011978.
 PR
 XX (MOLE-) MOLECULAR ENGINES LAB.
 PA
 PI Telerman A, Amson R, Tuijnder M;

XX WPI; 2003-313353/30.
 DR
 XX
 PT New isolated nucleic acid, useful for treating viral diseases associated
 PT with tumors and cell degeneration, also related polypeptides, antibodies
 PT and transfected cells.
 XX
 PS Disclosure; Page 668; 720pp; French.
 XX
 CC The invention relates to a novel isolated 17 mer nucleic acid sequence,
 CC given in the specification, a sequence containing at least 15 consecutive
 CC nucleotides from the 17 mer sequence, a sequence with, after optimal
 CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
 CC hybridizes to them under highly stringent conditions, or the complement
 CC of any of them, or the corresponding RNA. The novel isolated nucleic
 CC acids of the invention are useful as probes and primers for detecting,
 CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
 CC component of a gene chip, in vitro as (anti)sense reagents, and for
 CC production of recombinant polypeptides. Any of the nucleic acids,
 CC polypeptides, vectors containing the nucleic acids, cells containing the
 CC vector or antibodies directed against the polypeptides are useful for
 CC preparation of pharmaceuticals for prevention and/or treatment of viral
 CC diseases that are characterised by development of tumours or cell
 CC degeneration, specifically cancer but also Alzheimer's disease and
 CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
 CC patient samples is useful for diagnosis and/or prognosis of these
 CC diseases. The polypeptides can also be used to generate antibodies, and
 CC both the polypeptide and antibodies are useful as components of protein
 CC chips. The nucleic acid sequences of the invention can be used in gene
 CC therapy. This polynucleotide sequence represents a tumour suppression
 CC related human fukutin oligonucleotide of the invention
 XX
 SQ Sequence 17 BP; 2 A; 4 C; 2 G; 9 T; 0 U; 0 Other;
 Query Match 0.6%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 9.3e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1585 TCTATTCTCGTCT 1599
 |||||
 Db 3 TCTATTCTCGTCT 17
 RESULT 1469
 ABT35969/c
 ID ABT35969 standard; DNA; 17 BP.
 XX
 AC ABT35969;
 XX
 DT 12-JUN-2003 (first entry)
 XX
 DE Tumour suppression related human fukutin oligo SEQ ID No 1606.
 XX
 KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
 KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
 KW schizophrenia; protein chip; gene therapy; tumour suppression;
 KW human fukutin; ds.
 XX
 OS Homo sapiens.
 XX
 XX WO2003025175-A2.
 XX
 XX 27-MAR-2003.
 XX
 XX 17-SEP-2002; 2002WO-IB004208.
 XX
 XX 17-SEP-2001; 2001FR-00011978.
 XX
 XX (MOLE-) MOLECULAR ENGINES LAB.
 XX
 XX Telerman A, Amson R, Tuijnder M;
 XX WPI; 2003-313353/30.
 XX
 PT New isolated nucleic acid, useful for treating viral diseases associated

XX
 PT New isolated nucleic acid, useful for treating viral diseases associated
 PT with tumors and cell degeneration, also related polypeptides, antibodies
 PT and transfected cells.
 XX
 PS Disclosure; Page 220; 720pp; French.
 XX
 CC The invention relates to a novel isolated 17 mer nucleic acid sequence,
 CC given in the specification, a sequence containing at least 15 consecutive
 CC nucleotides from the 17 mer sequence, a sequence with, after optimal
 CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
 CC hybridizes to them under highly stringent conditions, or the complement
 CC of any of them, or the corresponding RNA. The novel isolated nucleic
 CC acids of the invention are useful as probes and primers for detecting,
 CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
 CC component of a gene chip, in vitro as (anti)sense reagents, and for
 CC production of recombinant polypeptides. Any of the nucleic acids,
 CC polypeptides, vectors containing the nucleic acids, cells containing the
 CC vector or antibodies directed against the polypeptides are useful for
 CC preparation of pharmaceuticals for prevention and/or treatment of viral
 CC diseases that are characterised by development of tumours or cell
 CC degeneration, specifically cancer but also Alzheimer's disease and
 CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
 CC patient samples is useful for diagnosis and/or prognosis of these
 CC diseases. The polypeptides can also be used to generate antibodies, and
 CC both the polypeptide and antibodies are useful as components of protein
 CC chips. The nucleic acid sequences of the invention can be used in gene
 CC therapy. This polynucleotide sequence represents a tumour suppression
 CC related human fukutin oligonucleotide of the invention
 XX
 SQ Sequence 17 BP; 2 A; 3 C; 5 G; 7 T; 0 U; 0 Other;
 Query Match 0.6%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 9.3e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 259 AAGTACCACACGCGAT 273
 |||||
 Db 16 AAGAACCCACACGCGAT 2
 RESULT 1470
 ABT37699
 ID ABT37699 standard; DNA; 17 BP.
 XX
 AC ABT37699;
 XX
 DT 12-JUN-2003 (first entry)
 XX
 DE Tumour suppression related human fukutin oligo SEQ ID No 3336.
 XX
 KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
 KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
 KW schizophrenia; protein chip; gene therapy; tumour suppression;
 KW human fukutin; ds.
 XX
 OS Homo sapiens.
 XX
 XX WO2003025175-A2.
 XX
 XX 27-MAR-2003.
 XX
 XX 17-SEP-2002; 2002WO-IB004208.
 XX
 XX 17-SEP-2001; 2001FR-00011978.
 XX
 XX (MOLE-) MOLECULAR ENGINES LAB.
 XX
 XX Telerman A, Amson R, Tuijnder M;
 XX WPI; 2003-313353/30.
 XX
 PT New isolated nucleic acid, useful for treating viral diseases associated

PT with tumors and cell degeneration, also related polypeptides, antibodies
 PT and transfected cells.
 XX
 PS Disclosure; Page 424; 720pp; French.
 XX
 CC The invention relates to a novel isolated 17 mer nucleic acid sequence,
 CC given in the specification, a sequence containing at least 15 consecutive
 CC nucleotides from the 17 mer sequence, a sequence with, after optimal
 CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
 CC hybridizes to them under highly stringent conditions, or the complement
 CC of any of them, or the corresponding RNA. The novel isolated nucleic
 CC acids of the invention are useful as probes and primers for detecting,
 CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
 CC component of a gene chip, in vitro as (anti)sense reagents, and for
 CC production of recombinant polypeptides. Any of the nucleic acids,
 CC polypeptides, vectors containing the nucleic acids, cells containing the
 CC vector or antibodies directed against the polypeptides are useful for
 CC preparation of pharmaceuticals for prevention and/or treatment of viral
 CC diseases that are characterized by development of tumours or cell
 CC degeneration, specifically cancer but also Alzheimer's disease and
 CC schizophrénia. Analysis of the expression of the 17 mer nucleic acids in
 CC patient samples is useful for diagnosis and/or prognosis of these
 CC diseases. The polypeptides can also be used to generate antibodies, and
 CC both the polypeptide and antibodies are useful as components of protein
 CC chips. The nucleic acid sequences of the invention can be used in gene
 CC therapy. This polynucleotide sequence represents a tumour suppression
 CC related human fukutin oligonucleotide of the invention
 XX
 SQ Sequence 17 BP; 3 A; 8 C; 1 G; 5 T; 0 U; 0 Other;
 Query Match 0.6%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 9.3e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1701 TGCCACCCATCTTC 1715
 Db 3 TCCACCCATCTTC 17
 RESULT 1471
 ABT34688/c
 ID ABT34688 standard; DNA; 17 BP.
 XX
 AC ABT34688;
 XX
 DT 12-JUN-2003 (first entry)
 XX
 DE Tumour suppression related human fukutin oligo SEQ ID No 325.
 XX
 KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
 KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
 KW schizophrénia; protein chip; gene therapy; tumour suppression;
 KW human fukutin; ds.
 XX
 OS Homo sapiens.
 XX
 PN WO2003025175-A2.
 XX
 PD 27-MAR-2003.
 XX
 PF 17-SEP-2002; 2002WO-IB004208.
 XX
 PR 17-SEP-2001; 2001FR-00011978.
 XX
 PA (MOLE-) MOLECULAR ENGINES LAB.
 XX
 PI Telerman A, Amson R, Tuijnder M;
 XX
 DR WPI; 2003-313353/30.
 XX
 PT New isolated nucleic acid, useful for treating viral diseases associated
 PT with tumors and cell degeneration, also related polypeptides, antibodies
 PT and transfected cells.

XX
 PS Disclosure; Page 72; 720pp; French.
 XX
 CC The invention relates to a novel isolated 17 mer nucleic acid sequence,
 CC given in the specification, a sequence containing at least 15 consecutive
 CC nucleotides from the 17 mer sequence, a sequence with, after optimal
 CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
 CC hybridizes to them under highly stringent conditions, or the complement
 CC of any of them, or the corresponding RNA. The novel isolated nucleic
 CC acids of the invention are useful as probes and primers for detecting,
 CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
 CC component of a gene chip, in vitro as (anti)sense reagents, and for
 CC production of recombinant polypeptides. Any of the nucleic acids,
 CC polypeptides, vectors containing the nucleic acids, cells containing the
 CC vector or antibodies directed against the polypeptides are useful for
 CC preparation of pharmaceuticals for prevention and/or treatment of viral
 CC diseases that are characterized by development of tumours or cell
 CC degeneration, specifically cancer but also Alzheimer's disease and
 CC schizophrénia. Analysis of the expression of the 17 mer nucleic acids in
 CC patient samples is useful for diagnosis and/or prognosis of these
 CC diseases. The polypeptides can also be used to generate antibodies, and
 CC both the polypeptide and antibodies are useful as components of protein
 CC chips. The nucleic acid sequences of the invention can be used in gene
 CC therapy. This polynucleotide sequence represents a tumour suppression
 CC related human fukutin oligonucleotide of the invention
 XX
 SQ Sequence 17 BP; 5 A; 2 C; 5 G; 5 T; 0 U; 0 Other;
 Query Match 0.6%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 9.3e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1270 AAGCCATCTCGATC 1284
 Db 15 AAGCTCATCTCGATC 1
 RESULT 1472
 ABT40012/c
 ID ABT40012 standard; DNA; 17 BP.
 XX
 AC ABT40012;
 XX
 DT 13-JUN-2003 (first entry)
 XX
 DE Tumour suppression related human fukutin oligo SEQ ID No 5649.
 XX
 KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip;
 KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
 KW schizophrénia; protein chip; gene therapy; tumour suppression;
 KW human fukutin; ds.
 XX
 OS Homo sapiens.
 XX
 PN WO2003025175-A2.
 XX
 PD 27-MAR-2003.
 XX
 PF 17-SEP-2002; 2002WO-IB004208.
 XX
 PR 17-SEP-2001; 2001FR-00011978.
 XX
 PA (MOLE-) MOLECULAR ENGINES LAB.
 XX
 PI Telerman A, Amson R, Tuijnder M;
 XX
 DR WPI; 2003-313353/30.
 XX
 PT New isolated nucleic acid, useful for treating viral diseases associated
 PT with tumors and cell degeneration, also related polypeptides, antibodies
 PT and transfected cells.
 XX
 PS Disclosure; Page 694; 720pp; French.

XX The invention relates to a novel isolated 17 mer nucleic acid sequence.
 CC given in the specification, a sequence containing at least 15 consecutive
 CC nucleotides from the 17 mer sequence, a sequence with, after optimal
 CC alignment, at least 80 % identity to the 17 mer sequence, or the complement
 CC hybridizes to them under highly stringent conditions, or the complement
 CC of any of them, or the corresponding RNA. The novel isolated nucleic
 CC acids of the invention are useful as probes and primers for detecting,
 CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
 CC component of a gene chip, in vitro as (anti)sense reagents, and for
 CC production of recombinant polypeptides. Any of the nucleic acids,
 CC polypeptides, vectors containing the nucleic acids, cells containing the
 CC vector or antibodies directed against the polypeptides are useful for
 CC preparation of pharmaceuticals for prevention and/or treatment of viral
 CC diseases that are characterised by development of tumours or cell
 CC degeneration, specifically cancer but also Alzheimer's disease and
 CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
 CC patient samples is useful for diagnosis and/or prognosis of these
 CC diseases. The polypeptides can also be used to generate antibodies, and
 CC both the polypeptide and antibodies are useful as components of protein
 CC chips. The nucleic acid sequences of the invention can be used in gene
 CC therapy. This polynucleotide sequence represents a tumour suppression
 CC related human fukutin oligonucleotide of the invention
 XX
 SQ Sequence 17 BP; 1 A; 11 C; 2 G; 3 T; 0 U; 0 Other;
 Query Match 0.6%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 9.3e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 13 GGGCGGGAGGGCGGA 27
 Db 17 GGGCGGGAGGGGAGGA 3
 RESULT 1473
 ABT37435/c
 ID ABT37435 standard; DNA; 17 BP.
 XX
 AC ABT37435;
 XX
 DT 12-JUN-2003 (first entry)
 DE Tumour suppression related human fukutin oligo SEQ ID No 3072.
 KW Cytostatic; virucide; neuroprotective; nontropic; neuroleptic; gene chip;
 KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
 KW schizophrenia; protein chip; gene therapy; tumour suppression;
 KW human fukutin; ds.
 XX
 OS Homo sapiens.
 XX
 PN WO2003025175-A2.
 XX
 PD 27-MAR-2003.
 XX
 PF 17-SEP-2002; 2002WO-IB004208.
 XX
 PR 17-SEP-2001; 2001FR-00011978.
 XX
 XX (MOLE-) MOLECULAR ENGINES LAB.
 XX
 XX Telerman A, Amson R, Tuijnder M;
 XX
 XX WPI; 2003-313353/30.
 XX
 XX New isolated nucleic acid, useful for treating viral diseases associated
 XX with tumors and cell degeneration, also related polypeptides, antibodies
 XX and transfected cells.
 XX
 XX Disclosure; Page 392; 720pp; French.
 XX
 XX The invention relates to a novel isolated 17 mer nucleic acid sequence,
 CC given in the specification, a sequence containing at least 15 consecutive
 CC nucleotides from the 17 mer sequence, a sequence with, after optimal

CC given in the specification, a sequence containing at least 15 consecutive
 CC nucleotides from the 17 mer sequence, a sequence with, after optimal
 CC alignment, at least 80 % identity to the 17 mer sequence, or the complement
 CC hybridizes to them under highly stringent conditions, or the complement
 CC of any of them, or the corresponding RNA. The novel isolated nucleic
 CC acids of the invention are useful as probes and primers for detecting,
 CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
 CC component of a gene chip, in vitro as (anti)sense reagents, and for
 CC production of recombinant polypeptides. Any of the nucleic acids,
 CC polypeptides, vectors containing the nucleic acids, cells containing the
 CC vector or antibodies directed against the polypeptides are useful for
 CC preparation of pharmaceuticals for prevention and/or treatment of viral
 CC diseases that are characterised by development of tumours or cell
 CC degeneration, specifically cancer but also Alzheimer's disease and
 CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
 CC patient samples is useful for diagnosis and/or prognosis of these
 CC diseases. The polypeptides can also be used to generate antibodies, and
 CC both the polypeptide and antibodies are useful as components of protein
 CC chips. The nucleic acid sequences of the invention can be used in gene
 CC therapy. This polynucleotide sequence represents a tumour suppression
 CC related human fukutin oligonucleotide of the invention
 XX
 SQ Sequence 17 BP; 4 A; 4 C; 5 G; 4 T; 0 U; 0 Other;
 Query Match 0.6%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 9.3e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1949 TGGCCTCAAGTGAGC 1963
 Db 15 TGGCCTCAAGTGATC 1
 RESULT 1474
 ABT37128/c
 ID ABT37128 standard; DNA; 17 BP.
 XX
 AC ABT37128;
 XX
 DT 12-JUN-2003 (first entry)
 DE Tumour suppression related human fukutin oligo SEQ ID No 2765.
 KW Cytostatic; virucide; neuroprotective; nontropic; neuroleptic; gene chip;
 KW antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease;
 KW schizophrenia; protein chip; gene therapy; tumour suppression;
 KW human fukutin; ds.
 XX
 OS Homo sapiens.
 XX
 PN WO2003025175-A2.
 XX
 PD 27-MAR-2003.
 XX
 PF 17-SEP-2002; 2002WO-IB004208.
 XX
 PR 17-SEP-2001; 2001FR-00011978.
 XX
 XX (MOLE-) MOLECULAR ENGINES LAB.
 XX
 XX Telerman A, Amson R, Tuijnder M;
 XX
 XX WPI; 2003-313353/30.
 XX
 XX New isolated nucleic acid, useful for treating viral diseases associated
 XX with tumors and cell degeneration, also related polypeptides, antibodies
 XX and transfected cells.
 XX
 XX Disclosure; Page 356; 720pp; French.
 XX
 XX The invention relates to a novel isolated 17 mer nucleic acid sequence,
 CC given in the specification, a sequence containing at least 15 consecutive
 CC nucleotides from the 17 mer sequence, a sequence with, after optimal

CC alignment, at least 80 % identity to the 17 mer sequence, a sequence that
CC hybridizes to them under highly stringent conditions, or the complement
CC of any of them, or the corresponding RNA. The novel isolated nucleic
CC acids of the invention are useful as probes and primers for detecting,
CC identifying, quantifying and/or amplifying a nucleic acid, e.g. as one
CC component of a gene chip, in vitro as (anti)sense reagents, and for
CC production of recombinant polypeptides. Any of the nucleic acids,
CC polypeptides, vectors containing the nucleic acids, cells containing the
CC vector or antibodies directed against the polypeptides are useful for
CC preparation of pharmaceuticals for prevention and/or treatment of viral
CC diseases that are characterized by development of tumours or cell
CC degeneration, specifically cancer but also Alzheimer's disease and
CC schizophrenia. Analysis of the expression of the 17 mer nucleic acids in
CC patient samples is useful for diagnosis and/or prognosis of these
CC diseases. The polypeptides can also be used to generate antibodies, and
CC both the polypeptide and antibodies are useful as components of protein
CC chips. The nucleic acid sequences of the invention can be used in gene
CC therapy. This polynucleotide sequence represents a tumour suppression
CC related human fukutin oligonucleotide of the invention
XX
SQ Sequence 17 BP; 9 A; 2 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. NO. 9.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 2029 TTTCCTTTTGTGAGAT 2043
Db 16 TTTCCTTTTGTGAGAT 2

RESULT 1475
ADA99857
ID ADA99857 standard; DNA; 17 BP.
XX
AC ADA99857;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human MD23 scanning oligonucleotide SEQ ID 846.
XX
KW Cytostatic; immunostimulant; gene therapy; vaccine; human;
KW zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
KW developmental disorder; ss.
XX
OS Homo sapiens.
XX
FN EP1281758-A2.
XX
PD 05-FEB-2003.
XX
PF 30-JUL-2002; 2002EP-00016874.
XX
PR 02-AUG-2001; 2001US-00922181.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Shannon M, Gu Y, Nguyen C;
XX
DR WPI; 2003-423107/40.
XX
PT New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MD23,
PT MD24, MD27 or MD212, e.g. cancer.
XX
PS Example 8; SEQ ID NO 846; 103pp; English.
XX
CC The present invention relates to novel human zinc finger-containing
CC proteins and their coding sequences; MD23, MD24, MD27, MD212. MD23 is
CC encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,
CC MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome
CC 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,
CC or in manufacturing a medicament for treating or preventing a disorder,
CC associated with decreased or increased expression or activity of MD23,
CC MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic
CC acids and proteins are also useful for diagnosing or monitoring a disease
CC caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic
CC acids can also be used as probes to detect and characterize gross
CC alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are

CC 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,
CC or in manufacturing a medicament for treating or preventing a disorder
CC associated with decreased or increased expression or activity of MD23,
CC MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic
CC acids and proteins are also useful for diagnosing or monitoring a disease
CC caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic
CC acids can also be used as probes to detect and characterize gross
CC alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are
CC useful in constructing microarrays for measuring gene expression. The
CC proteins are useful as therapeutic agents for gene therapy or as
CC vaccines. The present sequence was used to illustrate the invention.
XX
SQ Sequence 17 BP; 3 A; 5 C; 6 G; 3 T; 0 U; 0 Other;
Query Match 0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. NO. 9.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1225 GCATCCCTGAGGAG 1239
Db 1 GCCTTCCCTGAGGAG 15

RESULT 1476
ADA99856
ID ADA99856 standard; DNA; 17 BP.
XX
AC ADA99856;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human MD23 scanning oligonucleotide SEQ ID 845.
XX
KW Cytostatic; immunostimulant; gene therapy; vaccine; human;
KW zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1;
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
KW developmental disorder; ss.
XX
OS Homo sapiens.
XX
FN EP1281758-A2.
XX
PD 05-FEB-2003.
XX
PF 30-JUL-2002; 2002EP-00016874.
XX
PR 02-AUG-2001; 2001US-00922181.
XX
PA (AEOM-) AEOMICA INC.
XX
PI Shannon M, Gu Y, Nguyen C;
XX
DR WPI; 2003-423107/40.
XX
PT New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MD23,
PT MD24, MD27 or MD212, e.g. cancer.
XX
PS Example 8; SEQ ID NO 845; 103pp; English.
XX
CC The present invention relates to novel human zinc finger-containing
CC proteins and their coding sequences; MD23, MD24, MD27, MD212. MD23 is
CC encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2,
CC MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome
CC 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy,
CC or in manufacturing a medicament for treating or preventing a disorder,
CC associated with decreased or increased expression or activity of MD23,
CC MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic
CC acids and proteins are also useful for diagnosing or monitoring a disease
CC caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic
CC acids can also be used as probes to detect and characterize gross
CC alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are

CC useful in constructing microarrays for measuring gene expression. The
CC proteins are useful as therapeutic agents for gene therapy or as
CC vaccines. The present sequence was used to illustrate the invention.

XX Sequence 17 BP; 2 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
SQ Query Match 0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 9.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1225 GCCATCCCTGAGGAG 1239
DB 2 GCCTTCCTGAGGAG 16
|||||

RESULT 1477
ADB03776/C
ID ADB03776 standard; DNA; 17 BP.
XX
AC ADB03776;
XX 20-NOV-2003 (first entry)
DT
XX Human MDZ7 scanning oligonucleotide SEQ ID 4762.
DE
XX Cytostatic; immunostimulant; gene therapy; vaccine; human;
KW zinc finger protein; MDZ3; MD24; MDZ7; MDZ12; chromosome 7q22.1;
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
KW developmental disorder; ss.
XX Homo sapiens.
OS
XX EP1281758-A2.
PN
XX 05-FEB-2003.
PD
XX 30-JUL-2002; 2002EP-00016874.
PF
XX 02-AUG-2001; 2001US-00922181.
PR
XX (AEOM-) AEOMICA INC.
PA
XX Shannon M, Gu Y, Nguyen C;
PI
XX WPI; 2003-423107/40.
DR
XX New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MDZ3,
PT MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX Example 8; SEQ ID NO 4762; 103pp; English.

XX The present invention relates to novel human zinc finger-containing
CC proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is
CC encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,
CC MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
CC 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,
CC or in manufacturing a medicament for treating or preventing a disorder
CC associated with decreased or increased expression or activity of MDZ3,
CC MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
CC acids and proteins are also useful for diagnosing or monitoring a disease
CC caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic
CC acids can also be used as probes to detect and characterize gross
CC alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
CC useful in constructing microarrays for measuring gene expression. The
CC proteins are useful as therapeutic agents for gene therapy or as
CC vaccines. The present sequence was used to illustrate the invention.

XX Sequence 17 BP; 0 A; 7 C; 2 G; 8 T; 0 U; 0 Other;
SQ Query Match 0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 9.3e+02;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1424 AGGAGAACAAAGAG 1438
DB 15 AGGAGAACAAAGAG 1
|||||

RESULT 1478
ADA99855
ID ADA99855 standard; DNA; 17 BP.
XX
AC ADA99855;
XX 20-NOV-2003 (first entry)
DT
XX Human MDZ3 scanning oligonucleotide SEQ ID 844.

XX Cytostatic; immunostimulant; gene therapy; vaccine; human;
KW zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
KW developmental disorder; ss.
XX Homo sapiens.
OS
XX EP1281758-A2.
PN
XX 05-FEB-2003.
PD
XX 30-JUL-2002; 2002EP-00016874.
PF
XX 02-AUG-2001; 2001US-00922181.
PR
XX (AEOM-) AEOMICA INC.
PA
XX Shannon M, Gu Y, Nguyen C;
PI
XX WPI; 2003-423107/40.
DR
XX New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MDZ3,
PT MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX Example 8; SEQ ID NO 844; 103pp; English.

XX The present invention relates to novel human zinc finger-containing
CC proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is
CC encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,
CC MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
CC 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,
CC or in manufacturing a medicament for treating or preventing a disorder
CC associated with decreased or increased expression or activity of MDZ3,
CC MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
CC acids and proteins are also useful for diagnosing or monitoring a disease
CC caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic
CC alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
CC useful in constructing microarrays for measuring gene expression. The
CC proteins are useful as therapeutic agents for gene therapy or as
CC vaccines. The present sequence was used to illustrate the invention.

SQ Sequence 17 BP; 2 A; 5 C; 6 G; 4 T; 0 U; 0 Other;
Query Match 0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 9.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1225 GCCATCCCTGAGGAG 1239
DB 3 GCCTTCCTGAGGAG 17
|||||

RESULT 1479

ADB03775/c
ID ADB03775 standard; DNA; 17 BP.
XX AC ADB03775;
XX DT 20-NOV-2003 (first entry)
XX DE Human MDZ7 scanning oligonucleotide SEQ ID 4761.
XX DE Cytostatic; immunostimulant; Gene therapy; vaccine; human;
KW zinc finger protein; MDZ3; MDZ4; MDZ7; MDZ12; chromosome 7q22.1;
KW chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
KW developmental disorder; ss.
XX OS Homo sapiens.
XX PN EP1281758-A2.
XX PD 05-FEB-2003.
XX PF 30-JUL-2002; 2002EP-00016874.
XX PR 02-AUG-2001; 2001US-00922181.
XX PA (AEOM-) AROMICA INC.
XX PI Shannon M, Gu Y, Nguyen C;
XX WPI; 2003-423107/40.
XX DT New zinc finger-containing proteins and nucleic acids, useful in
PT manufacturing a medicament for treating or preventing a disorder
PT associated with decreased or increased expression or activity of MDZ3,
PT MDZ4, MDZ7 or MDZ12, e.g. cancer.
XX PS Example 8; SEQ ID NO 4761; 103pp; English.
XX CC The present invention relates to novel human zinc finger-containing
CC proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is
CC encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 6p21.3-22.2,
CC MDZ7 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome
CC 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy,
CC or in manufacturing a medicament for treating or preventing a disorder
CC associated with decreased or increased expression or activity of MDZ3,
CC MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic
CC acids and proteins are also useful for diagnosing or monitoring a disease
CC caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic
CC acids can also be used as probes to detect and characterize gross
CC alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are
CC useful in constructing microarrays for measuring gene expression. The
CC proteins are useful as therapeutic agents for gene therapy or as
CC vaccines. The present sequence was used to illustrate the invention.
XX SQ Sequence 17 BP; 0 A; 8 C; 1 G; 8 T; 0 U; 0 Other;
Query Match 0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 9.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1424 AGGAGAAGAGGAG 1438
DB 16 AGGAGAAGAGGAG 2
RESULT 1480
ABZ61605
ID ABZ61605 standard; RNA; 17 BP.
XX AC ABZ61605;
XX DT 21-MAR-2003 (first entry)
XX DE Human H-Ras DNazyme target #396.

XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX OS Homo sapiens.
XX PN WO200297114-A2.
XX PD 05-DEC-2002.
XX PF 29-MAY-2002; 2002WO-US016840.
XX PR 29-MAY-2001; 2001US-0294140P.
PR 06-JUN-2001; 2001US-0296249P.
PR 10-SEP-2001; 2001US-0318471P.
XX PA (RIBO-) RIBOZYME PHARM INC.
XX PI Mcswiggen J;
XX WPI; 2003-140484/13.
XX DT Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX PS Claim 58; Page 118; 185pp; English.
XX CC The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC rheumatic activity. The nucleic acid molecules are useful for reducing
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC ribozymes of the invention
XX SQ Sequence 17 BP; 6 A; 6 C; 4 G; 0 T; 1 U; 0 Other;
Query Match 0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 9.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
QY 1251 GGACGAGACGACCC 1265
DB 1 GGACGAGACGACCC 15
RESULT 1481
ABZ60925/c
ID ABZ60925 standard; RNA; 17 BP.
XX AC ABZ60925;
XX DT 21-MAR-2003 (first entry)
XX DE Human K-Ras DNazyme substrate #1037.
XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX OS Homo sapiens.
XX PN WO200297114-A2.
XX PD 05-DEC-2002.

```

PF 29-MAY-2002; 2002WO-US016840.
XX
XX 29-MAY-2001; 2001US-0294140P.
PR 06-JUN-2001; 2001US-0296249P.
PR 10-SEP-2001; 2001US-0318471P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX Mcswiggen J;
XX
XX WPI; 2003-140484/13.
DR
XX
XX Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
XX Claim 58; Page 105; 185pp; English.
PS
XX
XX The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC rheumatic activity. The nucleic acid molecules are useful for reducing
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC ribozymes of the invention
XX
XX Sequence 17 BP; 7 A; 0 C; 2 G; 0 T; 8 U; 0 Other;
SQ
    Query Match      0.6%; Score 13.4; DB 1; Length 17;
    Best Local Similarity 93.3%; Pred. No. 9.3e+02;
    Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1614 TTATTAAATATAAAT 1628
DB 17 TTACTAAATATAAAT 3

RESULT 1482
ABZ61268/c
ID ABZ61268 standard; RNA; 17 BP.
XX
XX ABZ61268;
AC
XX
XX 21-MAR-2003 (first entry)
DT
XX
XX Human H-Ras DNzyme target #59.
DE
XX
XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX
XX Homo sapiens.
OS
XX
XX WO200297114-A2.
PN
XX
XX 05-DEC-2002.
PD
XX
XX 29-MAY-2002; 2002WO-US016840.
PF
XX
XX 29-MAY-2001; 2001US-0294140P.
PR 06-JUN-2001; 2001US-0296249P.
PR 10-SEP-2001; 2001US-0318471P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX Mcswiggen J;
XX
XX WPI; 2003-140484/13.
DR

```

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XX
XX Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
XX Claim 58; Page 112; 185pp; English.
PS
XX
XX The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC rheumatic activity. The nucleic acid molecules are useful for reducing
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC ribozymes of the invention
XX
XX Sequence 17 BP; 1 A; 9 C; 5 G; 0 T; 2 U; 0 Other;
SQ
    Query Match      0.6%; Score 13.4; DB 1; Length 17;
    Best Local Similarity 93.3%; Pred. No. 9.3e+02;
    Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 5 GGAGCGCGGCGCGG 19
DB 16 GGAGCGCGGTCGGG 2

RESULT 1483
ABZ60233/c
ID ABZ60233 standard; RNA; 17 BP.
XX
XX ABZ60233;
AC
XX
XX 21-MAR-2003 (first entry)
DT
XX
XX Human K-Ras DNzyme substrate #345.
DE
XX
XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX
XX Homo sapiens.
OS
XX
XX WO200297114-A2.
PN
XX
XX 05-DEC-2002.
PD
XX
XX 29-MAY-2002; 2002WO-US016840.
PF
XX
XX 29-MAY-2001; 2001US-0294140P.
PR 06-JUN-2001; 2001US-0296249P.
PR 10-SEP-2001; 2001US-0318471P.
XX
XX (RIBO-) RIBOZYME PHARM INC.
PA
XX Mcswiggen J;
XX
XX WPI; 2003-140484/13.
DR
XX
XX Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
XX Claim 58; Page 91; 185pp; English.
PS
XX
XX The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic

```

CC acid molecule of the invention has cytostatic, anti-HIV, and anti-rheumatic activity. The nucleic acid molecules are useful for reducing CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are CC also useful for treating breast, ovarian, colorectal, lung, prostate, CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524, CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human CC ribozymes of the invention

XX SQ Sequence 17 BP; 6 A; 2 C; 1 G; 0 T; 8 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 9.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1605 TATATAAAATTATTA 1619
DB 17 TATATAAAATTAGTA 3

RESULT 1484
ABZ60906/C
ID ABZ60906 standard; RNA; 17 BP.
XX AC ABZ60906;
XX DT 21-MAR-2003 (first entry)
XX DE Human K-Ras DNzyme substrate #1018.

XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX OS Homo sapiens.

XX WO200297114-A2.
XX 05-DEC-2002.
XX 29-MAY-2002; 2002WO-US016840.
XX 29-MAY-2001; 2001US-0294140P.
PR 06-JUN-2001; 2001US-0296249P.
PR 10-SEP-2001; 2001US-0318471P.

XX (RIBO-) RIBOZYME PHARM INC.
XX Meswiggen J;
XX WPI; 2003-140484/13.
XX Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX PS Claim 58; Page 104; 185pp; English.

XX The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC rheumatic activity. The nucleic acid molecules are useful for reducing
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC ribozymes of the invention

XX SQ Sequence 17 BP; 5 A; 3 C; 2 G; 0 T; 7 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 9.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 209 GAAATGGAATCT 223
DB 15 GACAATGGAATCT 1

RESULT 1485
ABZ59988
ID ABZ59988 standard; RNA; 17 BP.
XX AC ABZ59988;
XX DT 21-MAR-2003 (first entry)
XX DE Human K-Ras DNzyme substrate #100.

XX Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.

XX OS Homo sapiens.
XX WO200297114-A2.
XX 05-DEC-2002.
XX 29-MAY-2002; 2002WO-US016840.

XX 29-MAY-2001; 2001US-0294140P.
PR 06-JUN-2001; 2001US-0296249P.
PR 10-SEP-2001; 2001US-0318471P.
XX (RIBO-) RIBOZYME PHARM INC.

XX Meswiggen J;
XX WPI; 2003-140484/13.
XX Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX PS Claim 58; Page 86; 185pp; English.

XX The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytostatic, anti-HIV, and anti-
CC rheumatic activity. The nucleic acid molecules are useful for reducing
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC ribozymes of the invention

XX SQ Sequence 17 BP; 1 A; 2 C; 3 G; 0 T; 11 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 26.7%; Pred. No. 9.3e+02;
Matches 4; Conservative 10; Mismatches 1; Indels 0; Gaps 0;

QY 1589 TTCTCTGTGTATTT 1603
DB 2 UUUUUUGUUAUUU 16

RESULT 1486
ABZ60244/C


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ID ABZ60244 standard; RNA; 17 BP.
XX
AC ABZ60244;
XX
DT 21-MAR-2003 (first entry)
XX
DE Human K-Ras DNzyme substrate #356.
XX
KW Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
KW enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytotstatic; anti-HIV;
KW anti-rheumatic; cancer; AIDS; ss.
XX
OS Homo sapiens.
XX
PN WO200297114-A2.
XX
PD 05-DEC-2002.
XX
PF 29-MAY-2002; 2002WO-US016840.
XX
PR 29-MAY-2001; 2001US-0294140P.
PR 06-JUN-2001; 2001US-0296249P.
PR 10-SEP-2001; 2001US-0318471P.
XX
PA (RIBO-) RIBOZYME PHARM INC.
XX
PI Mcswiggen J;
XX
DR WPI; 2003-140484/13.
XX
PT Novel short interfering RNA and enzymatic nucleic acid useful for
PT treating cancer, modulates the expression of a nucleic acid encoding
PT HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
XX
PS Claim 58; Page 91; 185pp; English.
XX
CC The invention relates to a novel short interfering RNA (siRNA) nucleic
CC acid molecule or an enzymatic nucleic acid molecule, that modulates
CC expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras,
CC human immunodeficiency virus (HIV) or a component of HIV. The nucleic
CC acid molecule of the invention has cytotstatic, anti-HIV, and anti-
CC rheumatic activity. The nucleic acid molecules are useful for reducing
CC HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are
CC also useful for treating breast, ovarian, colorectal, lung, prostate,
CC bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
CC shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ68524,
CC ABZ66530 - ABZ66585 represent substrate/target sequences for the human
CC ribozymes of the invention
XX
SQ Sequence 17 BP; 6 A; 1 C; 4 G; 0 T; 6 U; 0 Other;
Query Match 0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 9.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 274 GACTACATTAAATTC 288
Db 16 GACTACATTAAATTC 2

RESULT 1487
ACCG8598
ID ACCG8598 standard; DNA; 17 BP.
XX
AC ACCG8598;
XX
DT 01-JUL-2003 (first entry)
XX
DE Murine oligonucleotide associated with tumour supression, SEQ ID 5845.
XX
KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
KW tumour supression; tumour reversion; apoptosis; virus resistance;
KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
KW

KW schizophrenia; ss.
XX
OS Mus musculus.
XX
PN WO2003025176-A2.
XX
PD 27-MAR-2003.
XX
PF 17-SEP-2002; 2002WO-IB004210.
XX
PR 17-SEP-2001; 2001PR-00011979.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-333167/31.
XX
PT New isolated nucleic acid, useful for treating viral diseases associated
PT with tumors and cell degeneration, also related polypeptides, antibodies
PT and transfected cells.
XX
PS Disclosure; Page 714; 738pp; French.
XX
CC The present invention relates to murine oligonucleotides (ACC62754-
CC ACC6806), which are associated with tumour suppression, tumour
CC reversion, apoptosis and virus resistance. The oligonucleotides are
CC useful as (1) as probes and primers for detecting, identifying,
CC quantifying and/or amplifying nucleic acid, e.g. as one component of a
CC gene chip; in vitro as (anti)sense reagents; and (2) for production of
CC recombinant polypeptides. The oligonucleotides are useful for preparation
CC of pharmaceuticals for prevention and/or treatment of viral diseases that
CC are characterised by development of tumours or cell degeneration,
CC specifically cancer but also Alzheimer's disease and schizophrenia
XX
SQ Sequence 17 BP; 3 A; 4 C; 3 G; 7 T; 0 U; 0 Other;
Query Match 0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 9.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1987 TCTGTCCTCTCTCTAA 2001
Db 3 TCTGTCCTCTCTCTAA 17

RESULT 1488
ACCG3568
ID ACCG3568 standard; DNA; 17 BP.
XX
AC ACCG3568;
XX
DT 01-JUL-2003 (first entry)
XX
DE Murine oligonucleotide associated with tumour supression, SEQ ID 815.
XX
KW Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
KW tumour supression; tumour reversion; apoptosis; virus resistance;
KW viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
KW schizophrenia; ss.
XX
OS Mus musculus.
XX
PN WO2003025176-A2.
XX
PD 27-MAR-2003.
XX
PF 17-SEP-2002; 2002WO-IB004210.
XX
PR 17-SEP-2001; 2001PR-00011979.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX

```

PI Telerman A, Amson R, Tuijnder M;
 XX WPI; 2003-333167/31.
 XX
 XX New isolated nucleic acid, useful for treating viral diseases associated
 PT with tumors and cell degeneration, also related polypeptides, antibodies
 PT and transfected cells.
 XX
 XX Disclosure; Page 126; 738pp; French.
 XX
 XX The present invention relates to murine oligonucleotides (ACC62/54-
 CC ACC6806), which are associated with tumour suppression, tumour
 CC reversion, apoptosis and virus resistance. The oligonucleotides are
 CC useful as (1) as probes and primers for detecting, identifying,
 CC quantifying and/or amplifying nucleic acid, e.g. as one component of a
 CC gene chip; in vitro as (anti)sense reagents; and (2) for production of a
 CC recombinant polypeptides. The oligonucleotides are useful for preparation
 CC of pharmaceuticals for prevention and/or treatment of viral diseases that
 CC are characterised by development of tumours or cell degeneration,
 CC specifically cancer but also Alzheimer's disease and schizophrenia
 XX
 XX Sequence 17 BP; 2 A; 2 C; 4 G; 9 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 9.3e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1591 TCCTCTGTGTTTAT 1605
 DB 3 TCCTCTGTGTTTAT 17
 RESULT 1489
 ADB40235/C
 ID ADB40235 standard; DNA; 17 BP.
 XX
 XX ADB40235;
 XX
 XX 18-DEC-2003 (revised)
 DT 04-DEC-2003 (first entry)
 XX
 XX Tumour suppression/reversion associated nucleotide #558.
 DE
 XX cytostatic; antiviral; neuroprotective; nontropic; neuroleptic; ss;
 KW primer; probe; tumour suppression; tumour reversion; apoptosis;
 KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
 KW diagnosis.
 XX
 XX Homo sapiens.
 OS
 XX WO2003040369-A2.
 PN
 XX 15-MAY-2003.
 PD
 XX 17-SEP-2002; 2002WO-IB004219.
 PF
 XX 17-SEP-2001; 2001FR-00011981.
 PR
 XX (MOLE-) MOLECULAR ENGINES LAB.
 PA
 XX Telerman A, Amson R, Tuijnder M;
 XX WPI; 2003-441574/41.
 XX
 XX New nucleic acid encoding human prostate membrane-specific antigen,
 PT useful e.g. for treatment of tumors and viral infection, also related
 PT polypeptide and antibodies.
 XX
 XX Disclosure; Page 97; 771pp; French.
 PS
 XX The invention relates to the isolation of 6327 nucleotide sequences,
 CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
 CC sequence having at least 80% identity, after optimal alignment, with the

CC nucleotides, a sequence that hybridizes under stringent conditions with
 CC the nucleotides, or the complement, or corresponding RNA, of the
 CC nucleotides. The nucleotides are used as probes or primers for detecting,
 CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
 CC sense and antisense sequences, of nucleotides involved in tumour
 CC suppression or reversion, apoptosis and or viral resistance, to produce
 CC recombinant polypeptides, and to prepare transgenic animals, as
 CC experimental models. The nucleotides (also vectors containing them and
 CC cells containing the vectors), the encoded polypeptides and antibodies
 CC (Ab) against the polypeptide are useful for prevention and/or treatment
 CC of viral infections or diseases characterized by development and/or tumours
 CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
 CC Analysis of the expression of the nucleotides can be used for diagnosis
 CC and/or prognosis of these diseases. The nucleotides and polypeptides can
 CC also be used to screen for their specific interactive molecules,
 CC potentially useful for treating diseases associated with abnormal
 CC expression of the nucleotides.
 XX
 XX Sequence 17 BP; 3 A; 4 C; 5 G; 5 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 9.3e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 479 TGCACCATGCAAGA 493
 DB 17 TGCACCGTCAAGA 3
 RESULT 1490
 ADB40896
 ID ADB40896 standard; DNA; 17 BP.
 XX
 XX ADB40896;
 XX
 XX 18-DEC-2003 (revised)
 DT 04-DEC-2003 (first entry)
 XX
 XX Tumour suppression/reversion associated nucleotide #1219.
 DE
 XX cytostatic; antiviral; neuroprotective; nontropic; neuroleptic; ss;
 KW primer; probe; tumour suppression; tumour reversion; apoptosis;
 KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
 KW diagnosis.
 XX
 XX Homo sapiens.
 OS
 XX WO2003040369-A2.
 PN
 XX 15-MAY-2003.
 PD
 XX 17-SEP-2002; 2002WO-IB004219.
 PF
 XX 17-SEP-2001; 2001FR-00011981.
 PR
 XX (MOLE-) MOLECULAR ENGINES LAB.
 PA
 XX Telerman A, Amson R, Tuijnder M;
 XX WPI; 2003-441574/41.
 XX
 XX New nucleic acid encoding human prostate membrane-specific antigen,
 PT useful e.g. for treatment of tumors and viral infection, also related
 PT polypeptide and antibodies.
 XX
 XX Disclosure; Page 174; 771pp; French.
 PS
 XX The invention relates to the isolation of 6327 nucleotide sequences,
 CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
 CC sequence having at least 80% identity, after optimal alignment, with the
 CC nucleotides, a sequence that hybridizes under stringent conditions with
 CC the nucleotides, or the complement, or corresponding RNA, of the
 CC nucleotides. The nucleotides are used as probes or primers for detecting,

CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
CC sense and antisense sequences, of nucleotides involved in tumour
CC suppression or reversion, apoptosis and or viral resistance, to produce
CC recombinant polypeptides, and to prepare transgenic animals, as
CC experimental models. The nucleotides (also vectors containing them and
CC cells containing the vectors), the encoded polypeptides and antibodies
CC (Ab) against the polypeptide are useful for prevention and/or treatment
CC of viral infections or diseases characterized by development of tumours
CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
CC Analysis of the expression of the nucleotides can be used for diagnosis
CC and/or prognosis of these diseases. The nucleotides and polypeptides can
CC also be used to screen for their specific interactive molecules,
CC potentially useful for treating diseases associated with abnormal
CC expression of the nucleotides.
XX
SQ Sequence 17 BP; 2 A; 4 C; 2 G; 9 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 9.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1585 TCTATTCTCTGCT 1599
Db 3 TCTATTCTCTGCT 17

RESULT 1491
ADB41134
ID ADB41134 standard; DNA; 17 BP.
XX
AC ADB41134;
XX
DT 18-DEC-2003 (revised)
DT 04-DEC-2003 (first entry)
XX
DE Tumour suppression/reversion associated nucleotide #1457.
XX
KW cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
KW primer; probe; tumour suppression; tumour reversion; apoptosis;
KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
KW diagnosis.
XX
OS Homo sapiens.
XX
PN WO2003040369-A2.
XX
PD 15-MAY-2003.
XX
PF 17-SEP-2002; 2002WO-IB004219.
XX
PR 17-SEP-2001; 2001PR-00011981.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-441574/41.
XX
PT New nucleic acid encoding human prostate membrane-specific antigen,
PT useful e.g. for treatment of tumors and viral infection, also related
PT polypeptide and antibodies.
XX
PS Disclosure; Page 202; 771pp; French.
XX
CC The invention relates to the isolation of 6327 nucleotide sequences,
CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
CC sequence having at least 80% identity, after optimal alignment, with the
CC nucleotides, a sequence that hybridizes under stringent conditions with
CC the nucleotides, or the complement, or corresponding RNA, of the
CC nucleotides. The nucleotides are used as probes or primers for detecting,
CC sense and antisense sequences, of nucleotides involved in tumour
CC suppression or reversion, apoptosis and or viral resistance, to produce
CC recombinant polypeptides, and to prepare transgenic animals, as
CC experimental models. The nucleotides (also vectors containing them and
CC cells containing the vectors), the encoded polypeptides and antibodies

CC recombinant polypeptides, and to prepare transgenic animals, as
CC experimental models. The nucleotides (also vectors containing them and
CC cells containing the vectors), the encoded polypeptides and antibodies
CC (Ab) against the polypeptide are useful for prevention and/or treatment
CC of viral infections or diseases characterized by development of tumours
CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
CC Analysis of the expression of the nucleotides can be used for diagnosis
CC and/or prognosis of these diseases. The nucleotides and polypeptides can
CC also be used to screen for their specific interactive molecules,
CC potentially useful for treating diseases associated with abnormal
CC expression of the nucleotides.
XX
SQ Sequence 17 BP; 3 A; 8 C; 1 G; 5 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 9.3e+02;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1701 TGCCACCCCATCTTC 1715
Db 3 TGCCACCCCATCTTC 17

RESULT 1492
ADB39844/C
ID ADB39844 standard; DNA; 17 BP.
XX
AC ADB39844;
XX
DT 18-DEC-2003 (revised)
DT 04-DEC-2003 (first entry)
XX
DE Tumour suppression/reversion associated nucleotide #167.
XX
KW cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
KW primer; probe; tumour suppression; tumour reversion; apoptosis;
KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
KW diagnosis.
XX
OS Homo sapiens.
XX
PN WO2003040369-A2.
XX
PD 15-MAY-2003.
XX
PF 17-SEP-2002; 2002WO-IB004219.
XX
PR 17-SEP-2001; 2001PR-00011981.
XX
PA (MOLE-) MOLECULAR ENGINES LAB.
XX
PI Telerman A, Amson R, Tuijnder M;
XX
DR WPI; 2003-441574/41.
XX
PT New nucleic acid encoding human prostate membrane-specific antigen,
PT useful e.g. for treatment of tumors and viral infection, also related
PT polypeptide and antibodies.
XX
PS Disclosure; Page 51; 771pp; French.
XX
CC The invention relates to the isolation of 6327 nucleotide sequences,
CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
CC sequence having at least 80% identity, after optimal alignment, with the
CC nucleotides, a sequence that hybridizes under stringent conditions with
CC the nucleotides, or the complement, or corresponding RNA, of the
CC nucleotides. The nucleotides are used as probes or primers for detecting,
CC sense and antisense sequences, of nucleotides involved in tumour
CC suppression or reversion, apoptosis and or viral resistance, to produce
CC recombinant polypeptides, and to prepare transgenic animals, as
CC experimental models. The nucleotides (also vectors containing them and
CC cells containing the vectors), the encoded polypeptides and antibodies

CC (Ab) against the polypeptide are useful for prevention and/or treatment
 CC of viral infections or diseases characterized by development of tumours
 CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
 CC Analysis of the expression of the nucleotides can be used for diagnosis
 CC and/or prognosis of these diseases. The nucleotides and polypeptides can
 CC also be used to screen for their specific interactive molecules,
 CC potentially useful for treating diseases associated with abnormal
 CC expression of the nucleotides.

XX Sequence 17 BP; 6 A; 3 C; 5 G; 3 T; 0 U; 0 Other;
 SQ Query Match 0.6%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 9.3e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 672 GTACTTCCCGAGAAC 686
 DB 15 GTACTTCCCGAGATC 1

RESULT 1493
 ADB43625/c
 ID ADB43625 standard; DNA; 17 BP.
 XX AC ADB43625;
 XX DT 18-DEC-2003 (revised)
 DT 04-DEC-2003 (first entry)
 XX DE Tumour suppression/reversion associated nucleotide #3948.

XX cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
 KW primer; probe; tumour suppression; tumour reversion; apoptosis;
 KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
 KW diagnosis.

XX Homo sapiens.
 XX WO2003040369-A2.
 XX 15-MAY-2003.
 XX 17-SEP-2002; 2002WO-IB004219.
 XX 17-SEP-2001; 2001FR-00011981.
 XX (MOLE-) MOLECULAR ENGINES LAB.
 XX Telerman A, Amson R, Tuijnder M;
 XX WPI; 2003-441574/41.

XX New nucleic acid encoding human prostate membrane-specific antigen,
 PT useful e.g. for treatment of tumors and viral infection, also related
 PT polypeptide and antibodies.
 XX Disclosure; Page 493; 771pp; French.

XX The invention relates to the isolation of 6327 nucleotide sequences,
 CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
 CC sequence having at least 80% identity, after optimal alignment, with the
 CC nucleotides, a sequence that hybridizes under stringent conditions with
 CC the nucleotides, or the complement, or corresponding RNA, of the
 CC nucleotides. The nucleotides are used as probes or primers for detecting,
 CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
 CC sense and antisense sequences, of nucleotides involved in tumour
 CC suppression or reversion, apoptosis and/or viral resistance, to produce
 CC recombinant polypeptides, and to prepare transgenic animals, as
 CC experimental models. The nucleotides (also vectors containing them and
 CC cells containing the vectors), the encoded polypeptides and antibodies
 CC (Ab) against the polypeptide are useful for prevention and/or treatment
 CC of viral infections or diseases characterized by development of tumours
 CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).

CC Analysis of the expression of the nucleotides can be used for diagnosis
 CC and/or prognosis of these diseases. The nucleotides and polypeptides can
 CC also be used to screen for their specific interactive molecules,
 CC potentially useful for treating diseases associated with abnormal
 CC expression of the nucleotides.

XX Sequence 17 BP; 3 A; 4 C; 4 G; 6 T; 0 U; 0 Other;
 SQ Query Match 0.6%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 9.3e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 261 GTACCACAGCATGA 275
 DB 17 GTACCACAGCATGA 3

RESULT 1494
 ADC04840/c
 ID ADC04840 standard; DNA; 17 BP.

XX AC ADC04840;
 XX DT 18-DEC-2003 (first entry)

XX Human Na/H exchanger-like protein 1 gene oligonucleotide #1287.

XX ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;
 KW NHEP1; passive replacement therapy; vaccine; diagnosis.

XX Homo sapiens.

XX EP1273660-A2.

XX 08-JAN-2003.

XX 25-JAN-2002; 2002EP-00001160.

XX 30-JAN-2001; 2001WO-US000666.

XX 23-MAY-2001; 2001US-00864761.

XX 21-DEC-2001; 2001US-0343331P.

XX (AEOM-) AEOMICA INC.

XX Gu Y;

XX WPI; 2003-302724/30.

XX New human sodium-hydrogen exchanger like protein 1 (NHEP1), useful as a
 PT passive replacement therapy or as a vaccine for treating or preventing
 PT disorders associated with aberrant expression or activity of human
 PT NHEP1.

XX Example 2; SEQ ID NO 1327; 468pp; English.

XX The invention relates to a nucleic acid molecule which encodes a Na+/H+
 CC exchanger like protein (NHEP1). The NHEP1 nucleic acid molecule, NHEP1
 CC polypeptide, an antibody against the protein or its antigen-binding
 CC fragment is useful in therapy. The NHEP1 nucleic acid molecule, NHEP1
 CC polypeptide and an agonist are particularly useful for manufacturing a
 CC medicament for treating or preventing a disorder associated with
 CC decreased expression or activity of human NHEP1. The antibody or its
 CC antigen-binding fragment, and an antagonist, are useful for manufacturing
 CC a medicament for treating or preventing a disorder associated with
 CC increased expression or activity of human NHEP1. The NHEP1 nucleic acid
 CC or protein is useful as passive replacement therapy, as a vaccine, or in
 CC diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide
 CC spanning the sequence of the human NHEP1 gene (ADC03514).

XX Sequence 17 BP; 1 A; 10 C; 0 G; 6 T; 0 U; 0 Other;

XX Query Match 0.6%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 9.3e+02;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1336 GAGGAGGAGAGGGG 1350
 ||||| ||||| |||||
 Db 17 GAGGAGGAGAGGGG 3

RESULT 1495
 ADC04841/C
 ID ADC04841 standard; DNA; 17 BP.
 XX
 AC ADC04841;
 XX
 DT 18-DEC-2003 (first entry)
 XX
 DE Human Na/H exchanger-like protein 1 gene oligonucleotide #1288.
 XX
 KW ss; gene therapy; vaccine; sodium/hydrogen exchanger like protein;
 KW NHEPL1; passive replacement therapy; vaccine; diagnosis.
 XX
 OS Homo sapiens.
 XX
 PN EP1273660-A2.
 XX
 PD 08-JAN-2003.
 XX
 PF 25-JAN-2002; 2002EP-00001160.
 XX
 PR 30-JAN-2001; 2001WO-US000666.
 PR 23-MAY-2001; 2001US-00864761.
 PR 21-DEC-2001; 2001US-0343331P.
 XX
 PA (AEOM-) AEOMICA INC.
 XX
 PI Gu Y;
 XX
 DR WPI; 2003-302724/30.
 XX
 PT New human sodium-hydrogen exchanger like protein 1 (NHEPL1), useful as a
 PT passive replacement therapy or as a vaccine for treating or preventing
 PT disorders associated with aberrant expression or activity of human
 PT NHEPL1.
 XX
 PS Example 2; SEQ ID NO 1328; 468pp; English.
 XX
 CC The invention relates to a nucleic acid molecule which encodes a Na⁺/H⁺
 CC exchanger like protein (NHEPL1). The NHEPL1 nucleic acid molecule, NHEPL1
 CC polypeptide, an antibody against the protein or its antigen-binding
 CC fragment is useful in therapy. The NHEPL1 nucleic acid molecule, NHEPL1
 CC polypeptide and an agonist are particularly useful for manufacturing a
 CC medicament for treating or preventing a disorder associated with
 CC decreased expression or activity of human NHEPL1. The antibody or its
 CC antigen-binding fragment, and an antagonist, are useful for manufacturing
 CC a medicament for treating or preventing a disorder associated with
 CC increased expression or activity of human NHEPL1. The NHEPL1 nucleic acid
 CC or protein is useful as passive replacement therapy, as a vaccine, or in
 CC diagnostic methods. This sequence corresponds to a 17-mer oligonucleotide
 CC spanning the sequence of the human NHEPL1 gene (ADC03514).
 XX
 SQ Sequence 17 BP; 0 A; 11 C; 0 G; 6 T; 0 U; 0 Other;
 Query Match 0.6%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 9.3e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1336 GAGGAGGAGAGGGG 1350
 ||||| ||||| |||||
 Db 16 GAGGAGGAGAGGGG 2

RESULT 1496
 ADB45869/C
 ID ADB45869 standard; DNA; 17 BP.

XX
 AC ADB45869;
 XX
 DT 18-DEC-2003 (first entry)
 XX
 DE Tumour suppression/reversion associated nucleotide #6192.
 XX
 KW cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
 KW primer; probe; tumour suppression; tumour reversion; apoptosis;
 KW virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
 KW diagnosis.
 XX
 OS Homo sapiens.
 XX
 PN WO2003040369-A2.
 XX
 PD 15-MAY-2003.
 XX
 PF 17-SEP-2002; 2002WO-IB004219.
 XX
 PR 17-SEP-2001; 2001PR-00011981.
 XX
 PA (MOLE-) MOLECULAR ENGINES LAB.
 XX
 PI Telerman A, Amson R, Tuijnder M;
 XX
 DR WPI; 2003-441574/41.
 XX
 CC New nucleic acid encoding human prostate membrane-specific antigen,
 CC useful e.g. for treatment of tumors and viral infection, also related
 CC polypeptide and antibodies.
 XX
 PS Disclosure; Page 755; 771pp; French.
 XX
 CC The invention relates to the isolation of 6327 nucleotide sequences,
 CC fragments of at least 15 consecutive nucleotides of these nucleotides, a
 CC sequence having at least 80% identity, after optimal alignment, with the
 CC nucleotides, a sequence that hybridizes under stringent conditions with
 CC the nucleotides, or the complement, or corresponding RNA, of the
 CC nucleotides. The nucleotides are used as probes or primers for detecting,
 CC identifying, quantifying and/or amplifying nucleic acids, as in vitro
 CC sense and antisense sequences, of nucleotides involved in tumour
 CC suppression or reversion, apoptosis and or viral resistance, to produce
 CC recombinant polypeptides, and to prepare transgenic animals, as
 CC experimental models. The nucleotides (also vectors containing them and
 CC cells containing the vectors), the encoded polypeptides and antibodies
 CC (Ab) against the polypeptide are useful for prevention and/or treatment
 CC of viral infections or diseases characterized by development of tumours
 CC or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
 CC Analysis of the expression of the nucleotides can be used for diagnosis
 CC and/or prognosis of these diseases. The nucleotides and polypeptides can
 CC also be used to screen for their specific interactive molecules,
 CC potentially useful for treating diseases associated with abnormal
 CC expression of the nucleotides.
 XX
 SQ Sequence 17 BP; 5 A; 2 C; 5 G; 5 T; 0 U; 0 Other;
 Query Match 0.6%; Score 13.4; DB 1; Length 17;
 Best Local Similarity 93.3%; Pred. No. 9.3e+02;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1270 AAGCGCATCTCGATC 1284
 ||||| ||||| |||||
 Db 15 AAGCTCATCTCGATC 1

RESULT 1497
 AAQ11158/C
 ID AAQ11158 standard; DNA; 18 BP.
 XX
 AC AAQ11158;
 XX
 DT 25-MAR-2003 (revised)

DT 31-MAY-1991 (first entry)
 XX Probe, AB1065, for identifying clones encoding phytase.
 DE Microbial phytase; animal feeds; inositol; inorganic phosphates; ss.
 XX
 KW Synthetic.
 XX
 OS EP420358-A.
 XX
 PN 03-APR-1991.
 PD
 XX 27-SEP-1990; 90EP-00202565.
 XX
 XX 27-SEP-1989; 89EP-00202436.
 PR
 PR 17-AUG-1990; 90EP-00202231.
 XX
 XX (KONN) GIST-BROCADES NV.
 PA (STAM) DSM NV.
 PA
 XX Van Gorcom RF, Van Hartingsveldt W, Vanparidon PA, Beenstra AE;
 PI Luiten RG, Seltén GCM;
 PI
 XX WPI; 1991-095799/14.
 DR
 XX DNA encoding phytase - used for recombinant expression for prodn. of
 PT phytase for conversion of phytate to inositol and inorganic phosphate
 PT esp. in animal feed.
 PT
 XX Disclosure; Fig 2 and page 32; 61pp; English.
 PS
 XX This oligonucleotide probe is useful for the isolation and cloning of the
 CC phytase gene. It is one of a first set of probes used in the isolation
 CC process. The use of recombinant DNA methods allows the large scale prodn.
 CC of proteins and peptides having phytase activity. These are used for the
 CC conversion of phytate to inositol and inorganic phosphate and can be used
 CC in industrial processes. The phosphate content of manure thus can be
 CC decreased. See also AAQ11157 and AAQ11159-75. (Updated on 25-MAR-2003 to
 CC correct PA field.) (Updated on 25-MAR-2003 to correct PI field.)
 XX
 SQ Sequence 18 BP; 1 A; 7 C; 5 G; 4 T; 0 U; 1 Other;
 Query Match 0.6%; Score 13.4; DB 1; Length 18;
 Best Local Similarity 82.4%; Pred. No. 1e+03;
 Matches 14; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
 QY 255 GACCAAGTACCACAGCG 271
 DB 18 GACTAGGTGCCACAGCG 2
 RESULT 1498
 AAQ30237/c
 ID AAQ30237 standard; DNA; 18 BP.
 XX
 AC AAQ30237;
 XX
 XX 25-MAR-2003 (revised)
 DT 07-DEC-1992 (first entry)
 XX
 DE Oligomer HIV211 for forming triplex with HIV target duplex.
 XX
 KW Human immunodeficiency virus; AIDS; modified; HIV; hepatitis; herpes;
 KW hepatitis; malignancy; inflammation; ss.
 XX
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 FH modified_base 1
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
 FT modified_base 2

FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
 FT modified_base 7
 FT /*tag= c
 FT /mod_base= OTHER
 FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
 FT modified_base 8
 FT /*tag= d
 FT /mod_base= OTHER
 FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
 FT modified_base 11
 FT /*tag= e
 FT /mod_base= OTHER
 FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
 FT modified_base 12
 FT /*tag= f
 FT /mod_base= OTHER
 FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
 FT misc_feature 15..16
 FT /*tag= i
 FT /note= "o-xyloso dimer synthon linkage"
 FT misc_feature 16..18
 FT /*tag= h
 FT /label= inverted_polarity_region
 FT /note= "see comments"
 FT modified_base 18
 FT /*tag= g
 FT /mod_base= OTHER
 FT /note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
 FT
 XX WO9209705-A1.
 XX
 XX 11-JUN-1992.
 PD
 XX 25-NOV-1991; 91WO-US008811.
 PP
 XX 23-NOV-1990; 90US-00617907.
 PR 18-JAN-1991; 91US-00643382.
 PR 08-APR-1991; 91US-00683420.
 PR 17-APR-1991; 91US-00686544.
 PR 17-APR-1991; 91US-00686546.
 PR 17-APR-1991; 91US-00686547.
 PR 27-SEP-1991; 91US-00766733.
 XX
 PA (GILE-) GILEAD SCI INC.
 XX
 XX Froehler B, Krawczyk S, Matteucci MD, Milligan J;
 XX WPI; 1992-217083/26.
 DR
 XX New oligomers contg. modified bases - which form a triplex with G-C
 PT doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,
 PT herpes malignancy and inflammation.
 XX
 XX Claim 12; Page 65; 77pp; English.
 PS
 XX The synthetic oligomer is capable of forming a triplex at physiological
 CC pH with a purine rich target sequence by coupling into the major groove
 CC of the duplex. The specific target sequence of this oligomer is an HIV
 CC target duplex contg. a purine-rich region concentrated on one chain of
 CC the duplex. The oligomer, and others like it are useful in diagnosis and
 CC therapy of diseases characterised by specific DNA duplex targets, e.g.
 CC HIV, hepatitis, herpes, malignant tumours and inflammation. The triple
 CC helices form under mild conditions thus assays may be carried out without
 CC subjecting the test specimen to harsh conditions. The oligomer contains
 CC an inverted polarity region formed from an o-xyloso dimer synthon. The
 CC linking gp. is o-xyloso (nucleotides have the 3' positions of xlyose
 CC sugars linked via the o-xyloso ring). Two nucleotides, in this case TT,
 CC are coupled through a xylene residue to form the dimer synthon. This
 CC additional modifications may rendering the oligomer stable to nuclease
 CC activity. The oligomer is able to inhibit gene expression, as verified by
 CC in vitro systems. See also AAQ25452-25501 and AAQ30226-448. (Updated on

```

CC 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 18 BP; 7 A; 0 C; 0 G; 11 T; 0 U; 0 Other;

Query Match          0.6%; Score 13.4; DB 1; Length 18;
Best Local Similarity 93.3%; Pred. No. 1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1607 TAAAAATTATTATAA 1621
DB 18 TAAAAATTATTATAA 4

RESULT 1499
AAQ30240/C
ID AAQ30240 standard; DNA; 18 BP.
XX
AC AAQ30240;
XX
DT 25-MAR-2003 (revised)
DT 07-DEC-1992 (first entry)
XX
DE Oligomer HIV214 for forming triplex with HIV target duplex.
XX
KW Human immunodeficiency virus; AIDS; modified; HIV; hepatitis; herpes;
KW hepatitis; malignancy; inflammation; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /*mod_base= OTHER
FT /*note= "OTHER= N4 N4 ethanocytosine"
FT modified_base 2 /*tag= b
FT /*mod_base= OTHER
FT /*note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
FT modified_base 7 /*tag= c
FT /*mod_base= OTHER
FT /*note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
FT modified_base 8 /*tag= d
FT /*mod_base= OTHER
FT /*note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
FT modified_base 11 /*tag= e
FT /*mod_base= OTHER
FT /*note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
FT modified_base 12 /*tag= f
FT /*mod_base= OTHER
FT /*note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
FT misc_feature 15..16 /*tag= i
FT /*note= "o-xyloso dimer synthon linkage"
FT misc_feature 16..18 /*tag= h
FT /*label= inverted polarity_region
FT /*note= "see comments"
FT modified_base 18 /*tag= g
FT /*mod_base= OTHER
FT /*note= "OTHER= N6 methyl-8-oxo 2' deoxyadenine"
XX
XX WO209705-A1.
XX
PN 11-JUN-1992.
PD
XX 25-NOV-1991; 91WO-US008811.
XX
XX 23-NOV-1990; 90US-00617907.
PR

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PR 18-JAN-1991; 91US-00643382.
PR 08-APR-1991; 91US-00683420.
PR 17-APR-1991; 91US-00686544.
PR 17-APR-1991; 91US-00686546.
PR 17-APR-1991; 91US-00686547.
PR 27-SEP-1991; 91US-00766733.
XX
PA (GILE-) GILEAD SCI INC.
XX
XX Froehler B, Krawczyk S, Matteucci MD, Milligan J;
XX WPI; 1992-217083/26.
XX
XX New oligomers contg. modified bases - which form a triplex with G-C
XX doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis,
XX herpes malignancy and inflammation.
XX
XX Claim 12; Page 65; 77pp; English.
XX
XX The synthetic oligomer is capable of forming a triplex at physiological
XX pH with a purine rich target sequence by coupling into the major groove
XX of the duplex. The specific target sequence of this oligomer is an HIV
XX target duplex contg. a purine-rich region concentrated on one chain of
XX the duplex. The oligomer, and others like it are useful in diagnosis and
XX therapy of diseases characterised by specific DNA duplex targets, e.g.
XX HIV, hepatitis, herpes, malignant tumours and inflammation. The triple
XX helices form under mild conditions thus assays may be carried out without
XX subjecting the test specimen to harsh conditions. The oligomer contains
XX an inverted polarity region formed from an o-xyloso dimer synthon. The
XX linking gp. is o-xyloso (nucleotides have the 3' positions of xylose
XX sugars linked via the o-xyloso ring). Two nucleotides, in this case TT,
XX are coupled through a xylene residue to form the dimer synthon. This
XX additional modifications may rendering the oligomer stable to nuclease
XX activity. The oligomer is able to inhibit gene expression, as verified by
XX in vitro systems. See also AAQ25452-25501 and AAQ30226-448. (Updated on
XX 25-MAR-2003 to correct PN field.)
XX
SQ Sequence 18 BP; 6 A; 1 C; 0 G; 11 T; 0 U; 0 Other;

Query Match          0.6%; Score 13.4; DB 1; Length 18;
Best Local Similarity 93.3%; Pred. No. 1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1607 TAAAAATTATTATAA 1621
DB 18 TAAAAATTATTATAA 4

RESULT 1500
AAQ70358
ID AAQ70358 standard; DNA; 18 BP.
XX
AC AAQ70358;
XX
DT 25-MAR-2003 (revised)
DT 15-FEB-1995 (first entry)
XX
DE Antisense oligonucleotide for human FGF.
XX
XX Fibroblast growth factor; hybridisation; laser procedures;
KW vascular smooth muscle cell; proliferation; SMC; vascular stenosis;
KW post angioplasty restenosis; atherosclerosis; cardiac hypertrophy;
KW organ transplant; ss.
XX
OS Synthetic.
XX
XX WO9415945-A1.
XX
PN 21-JUL-1994.
PD
XX 28-DEC-1993; 93WO-US012600.
XX
XX 31-DEC-1992; 92US-00999706.
PR

```

XX (TEXA-) TEXAS BIOTECHNOLOGY CORP.
 XX Denner LA, Rege AA, Dixon RA;
 XX WPI; 1994-249123/30.
 XX
 PT New anti-sense polynucleotide(s) to fibroblast growth factor receptor -
 PT used for inhibiting vascular smooth muscle cell proliferation, partic.
 PT for treating restenosis.
 XX
 XX Claim 3; Page 10; 53pp; English.
 XX
 CC The sequence is an antisense molecule directed against position -6 to +9,
 CC relative to the start codon of the gene for human fibroblast growth
 CC factor 1. The polynucleotide can be used for inhibiting vascular smooth
 CC muscle cell proliferation and for treating a disease e.g. vascular
 CC stenosis, post angioplasty restenosis, atherectomy, atherosclerosis,
 CC atrial venous shunt failure, cardiac hypertrophy, vascular surgery and
 CC organ transplant. See also AAQ70333-60. (Updated on 25-MAR-2003 to
 CC correct PN field.)
 XX
 XX Sequence 18 BP; 3 A; 10 C; 1 G; 4 T; 0 U; 0 Other;
 XX
 Query Match 0.6%; Score 13.4; DB 1; Length 18;
 Best Local Similarity 93.3%; Pred. No. 1e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1084 TTCAAGCTCCACATC 1098
 DB 2 TTCAGCTCCACATC 16
 XX
 RESULT 1501
 AAQ82183/c
 ID AAQ82183 standard; DNA; 18 BP.
 XX
 XX AAQ82183;
 XX
 XX 25-MAR-2003 (revised)
 XX 04-SEP-1995 (first entry)
 XX
 XX Chromosome 11 (locus D11S1076) STS primer cSRL-3b1-tA.
 XX
 XX sequence sampled mapping; genomic analysis; complex genome mapping;
 XX cosmid library; chromosome 11; sequence tagged site; STS analysis; ss.
 XX
 XX Synthetic.
 XX
 XX W09429486-A1.
 XX
 XX 22-DEC-1994.
 XX
 XX 15-JUN-1994; 94WO-US006810.
 XX
 XX 15-JUN-1993; 93US-00078471.
 XX 07-SEP-1993; 93US-00117952.
 XX
 XX (SALK) SALK INST BIOLOGICAL STUDIES.
 XX
 XX Evans GA, Smith MW;
 XX
 XX WPI; 1995-036508/05.
 XX
 XX Sequencing complex genomes, present as fragments in a cosmid library - by
 XX sequencing end-specific nucleotides of each clone then correlating with
 XX spatial relationship of cosmid, esp. for mammalian chromosomes.
 XX
 XX Example 4; Page 69; 128pp; English.
 XX
 XX Sequences were determined from the ends of chromosome 11-specific cosmids
 XX by automated sequencing without intermediate subcloning. A sample of 371
 XX DNA sequence fragments were determined and of these, 277 were suitable

CC for STS primer prediction by computer analysis (using the "Primer"
 CC program available from E.Lander, MIT). The STSs and cosmids were mapped
 CC by in situ hybridisation, somatic cell hybrid analysis or both. Using
 CC this method, 370 STSs specific for human chromosome 11 were generated and
 CC most of them were regionally mapped. This procedure illustrates a novel
 CC method for sequencing complex genomes, designated "sequence sampled
 CC mapping". The sequence sampled mapping method is useful for the
 CC completion of high density sequence-based maps, and ultimately, for the
 CC complete sequencing of genomic DNA directly from cosmid clones. See
 CC AAQ82001-Q82706 for STS primers. (Updated on 25-MAR-2003 to correct PN
 CC field.)
 XX
 XX Sequence 18 BP; 4 A; 1 C; 10 G; 3 T; 0 U; 0 Other;
 XX
 Query Match 0.8%; Score 13.4; DB 1; Length 18;
 Best Local Similarity 93.3%; Pred. No. 1e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1557 CTTCCCCAACCCCTC 1571
 DB 16 CTTCCCCAACCCACTC 2
 XX
 RESULT 1502
 AAX67240
 ID AAX67240 standard; RNA; 18 BP.
 XX
 XX AAX67240;
 XX
 XX 20-JUL-1999 (first entry)
 XX
 XX Mouse CD40 hairpin ribozyme target SEQ ID NO:3872.
 XX
 XX Arthritic condition; graft tolerance; immune response; target; cleavage;
 XX hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase;
 XX stromelysin; synovial membrane; joint; arthritis; osteoarthritis;
 XX rheumatoid arthritis; autoimmune disease; allergy; inflammation;
 XX diagnosis; ss.
 XX
 XX Mus sp.
 XX
 XX W09618736-A2.
 XX
 XX 20-JUN-1996.
 XX
 XX 22-NOV-1995; 95WO-US015516.
 XX
 XX 13-DEC-1994; 94US-00354920.
 XX 23-DEC-1994; 94US-00363253.
 XX 23-DEC-1994; 94US-00363254.
 XX 17-FEB-1995; 95US-00390850.
 XX 20-APR-1995; 95US-00426124.
 XX 02-MAY-1995; 95US-00432874.
 XX 04-MAY-1995; 95US-00434509.
 XX 07-JUL-1995; 95US-0000951P.
 XX 07-JUL-1995; 95US-0000974P.
 XX 07-AUG-1995; 95US-00512861.
 XX 05-OCT-1995; 95US-00541365.
 XX
 XX (RIBO-) RIBOZYME PHARM INC.
 XX
 XX Beigelman L, Stinchcomb DT, Jarvis T, Draper K, Pavco P;
 XX Meswigen J, Gustofson J, Usman N, Wincott F, Matulic-Adamic J;
 XX Karpelisky A, Thompson JD, Modak A, Burgin A;
 XX
 XX WPI; 1996-300653/30.
 XX
 XX Enzymatic nucleic acid molecules having a hammer-head motif - used for
 XX the treatment of arthritis, induction of graft tolerance or treatment of
 XX auto-immune diseases.
 XX
 XX Claim 10; Page 219; 307pp; English.

CC The present invention describes a novel enzymatic nucleic acid (ENA)
 CC having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues
 CC ; (ii) a 2'-C-allyl modification at position 4 of the ENA; (iii) at least
 CC ten 2'-O-methyl modifications; and (iv) a 3'-end modification. The ENA's
 CC can inhibit collagenase and stromelysin production in the synovial
 CC membrane of joints for the treatment or prevention of arthritis,
 CC particularly osteoarthritis or rheumatoid arthritis. The ENA's can also
 CC be used to treat antigen presenting cells of a donor to induce tolerance
 CC in a recipient to an alloantigen of a donor. They can also be used for
 CC enhancing graft tolerance or for treating autoimmune disease, and for
 CC treating allergies and other inflammatory conditions. The ENA's can also
 CC be used in diagnosis. Ribozyme therapy impacts on the expression of
 CC stromelysin without introducing the non-specific effects upon gene
 CC expression which accompany treatment with retinoids and dexamethasone.
 CC The concentration of ribozyme required to affect a therapeutic treatment
 CC is lower than that required of antisense molecules, and is highly
 CC specific. The present sequence is used in the exemplification of the
 CC present invention
 XX
 SQ Sequence 18 BP; 2 A; 9 C; 3 G; 0 T; 4 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 18;
 Best Local Similarity 66.7%; Pred. No. 1e+03;
 Matches 10; Conservative 4; Mismatches 1; Indels 0; Gaps 0;

QY 1974 TGCTGCGCTCTGTC 1988
 Db 3 USCCUGCCCCUGUC 17

RESULT 1503
 AAX70316/c
 ID AAX70316 standard; RNA; 18 BP.

XX AAX70316;

XX 28-JUL-1999 (first entry)

DE Human flt1 VEGF receptor hairpin ribozyme substrate #84.

XX Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
 KW KDR; hammerhead ribozyme; hairpin ribozyme; cleavage;
 KW tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease;
 KW fms-like tyrosine kinase 1; kinase insert domain containing receptor;
 KW foetal liver kinase 1; ss.

XX Homo sapiens.

XX WO9715662-A2.

XX 01-MAY-1997.

XX 25-OCT-1996; 96WO-US017480.

XX 26-OCT-1995; 95US-00059749.

PR 11-JAN-1996; 96US-00584040.

XX (RIBO-) RIBOZYME PHARM INC.

PA (CHIR) CHIRON CORP.

XX Pavco P, Mcswiggen J, Stinchcomb D, Escobedo J;

XX WPI; 1997-259017/23.

XX Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
 PT stability - useful for treating e.g. tumour angiogenesis, psoriasis,
 PT rheumatoid arthritis, etc., in a human patient.

PS Claim 4; Page 95; 218pp; English.

XX The present invention describes nucleic acid molecules which modulate the
 CC synthesis, expression and/or stability of a mRNA encoding 1 or more
 CC receptors of vascular endothelial growth factor (VEGF). A patient

CC (preferably human) having a condition associated with the level of the
 CC fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
 CC receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
 CC angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be
 CC treated by administering the nucleic acid molecule or the expression
 CC vector to the patient. AAX75725 to AAX75752 represent specific examples
 CC of nucleic acid molecules from the present invention

SQ Sequence 18 BP; 3 A; 7 C; 4 G; 0 T; 4 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 18;
 Best Local Similarity 93.3%; Pred. No. 1e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 351 TGGTGAGGACTGTCC 365

Db 17 TGGAGAGGACTGTCC 3

RESULT 1504
 AAT58646/c
 ID AAT58646 standard; DNA; 18 BP.

XX AAT58646;

XX 29-APR-1997 (first entry)

DE Probe 11 for typing HLA-DR10 human leukocyte antigen genes.

XX Major histocompatibility complex; MHC; class 1; HLA-DR; subtype;
 KW human leukocyte antigen; typing; hybridisation probe; ss.

XX Synthetic.

XX JP08308596-A.

XX 26-NOV-1996.

XX 11-MAR-1996; 96JP-00053480.

XX 10-MAR-1995; 95JP-00051437.

PA (WAKT) WAKUNAGA SEIYAKU KK.

XX WPI; 1997-059711/06.

XX Detection and typing of class I MHC HLA-DR antigens - can check multiple
 PT specimens easily and type all HLA-DR (D-related) antigens known to be
 PT present in the Japanese population.

PS Claim 1; Page 2; 9pp; Japanese.

XX The oligonucleotide of the present sequence is a member of a novel set of
 CC probes for typing the HLA-DR genes found among the Japanese population.
 CC Individual probes within the set are specific for particular HLA-DR
 CC subtypes

SQ Sequence 18 BP; 7 A; 7 C; 0 G; 4 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 18;
 Best Local Similarity 93.3%; Pred. No. 1e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1491 GGAGGAGGTCAAGTT 1505

Db 16 GGAGGAGGTCAAGTT 2

RESULT 1505
 AAT58670
 ID AAT58670 standard; DNA; 18 BP.

XX AAT58670;

XX 29-APR-1997 (first entry)
 DT
 XX
 DE Probe 11a for typing HLA-DR10 human leukocyte antigen genes.
 DE
 XX
 KW Major histocompatibility complex; MHC; class 1; HLA-DR; subtype;
 KW human leukocyte antigen; typing; hybridisation probe; ss.
 XX
 OS Synthetic.
 OS
 XX JF08308596-A.
 PN
 XX
 XX 26-NOV-1996.
 PD
 XX
 PF 11-MAR-1996; 96JP-00053480.
 PF
 XX 10-MAR-1995; 95JP-00051437.
 XX
 XX (WAKT) WAKUNAGA SEIYAKU KK.
 PA
 XX WPI; 1997-059711/06.
 DR
 XX
 PT Detection and typing of class I MHC HLA-DR antigens - can check multiple
 PT specimens easily and type all HLA-DR (D-related) antigens known to be
 PT present in the Japanese population.
 PT
 XX Disclosure; Page 3; 9pp; Japanese.
 XX
 XX The oligonucleotide which is complementary to the present sequence is a
 CC member of a novel set of probes for typing the HLA-DR genes found among
 CC the Japanese population. Individual probes within the set are specific
 CC for particular HLA-DR subtypes
 CC
 XX Sequence 18 BP; 4 A; 0 C; 7 G; 7 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 13.4; DB 1; Length 18;
 Best Local Similarity 93.3%; Pred. No. 1e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1491 GGAGGAGGTCAGTT 1505
 Db ||||| |||||
 3 GGAGGAGGTTAAGTT 17
 RESULT 1506
 AAV84235
 ID AAV84235 standard; cDNA; 18 BP.
 AC
 AC AAV84235;
 XX
 XX 29-MAR-1999 (first entry)
 DT
 XX Human CAAX processing enzyme RCE1 primer hrCE(12F).
 DE
 XX RCE1; hrCE1; hrCE1p; CAAX processing enzyme; human; tumour; cancer;
 KW therapy; diagnosis; Ras protein; endoproteinase; PCR; primer; ss.
 KW
 XX Synthetic.
 OS
 OS Homo sapiens.
 XX
 XX WO9854333-A2.
 PN
 XX
 PD 03-DEC-1998.
 XX
 XX 02-JUN-1998; 98WO-US011415.
 PF
 XX 02-JUN-1997; 97US-00047369.
 PR
 PR 14-JUL-1997; 97US-0052389P.
 PR
 XX (ACAC-) ACACIA BIOSCIENCES INC.
 PA
 XX Ashby MN, Dimster-Denk DG, Phillips JW;
 PI
 XX

DR WPI; 1999-059843/05.
 XX
 PT New DNA encoding mammalian CAAX-processing enzymes - used e.g. to treat
 PT CAAX-protein mediated diseases such as cancers and tumours associated
 PT with mutant Ras.
 PT
 XX Disclosure; Page 9; 98pp; English.
 PS
 XX This is the nucleotide sequence of primer hrCE(12F), used in PCR methods
 CC for hrCE1 cDNA (see AAV80322). The invention relates to new mammalian
 CC CAAX-processing enzymes, including hrCE1 protein (see AAW86009), a human
 CC functional homologue of yeast Rce1 protein, and nucleic acids encoding
 CC them. The new mammalian DNA and CAAX processing proteins represent
 CC potential targets for blocking the oncogenic action of mutant Ras protein
 CC in tumours or for modulating the activity of prenylated peripheral
 CC membrane proteins
 CC
 XX Sequence 18 BP; 2 A; 3 C; 10 G; 3 T; 0 U; 0 Other;
 SQ
 Query Match 0.6%; Score 13.4; DB 1; Length 18;
 Best Local Similarity 93.3%; Pred. No. 1e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 1851 GAAGGGTGGCTGGG 1865
 Db ||||| |||||
 1 GAAGGGTGGCTGGG 15
 RESULT 1507
 AAZ41148/c
 ID AAZ41148 standard; DNA; 18 BP.
 XX
 AC AAZ41148;
 XX
 XX 26-JAN-2000 (first entry)
 DT
 XX Human G-alpha-11 phosphorothioate antisense oligonucleotide #52.
 DE
 XX Identification; genetic target; gene modulation; human; probe;
 KW antisense oligonucleotide; phosphorothioate; PCR primer;
 KW nucleotide sequence-based technology; antisense drug discovery;
 KW target validation; ss.
 XX
 XX Synthetic.
 OS
 OS Homo sapiens.
 XX
 XX WO9953101-A1.
 PN
 XX 21-OCT-1999.
 PD
 XX 13-APR-1999; 99WO-US008268.
 PF
 XX 13-APR-1998; 98US-0081483P.
 PR
 PR 28-APR-1998; 98US-00067638.
 PR
 XX (ISIS-) ISIS PHARM INC.
 PA
 XX Cowsett LM, Baker BF, Mcneil J, Freier SM, Sasmor HM, Brooks DG;
 PI Ohasi C, Wyatt JR, Borchers AH, Vickers TA;
 XX WPI; 1999-620446/53.
 DR
 XX Identifying compounds which modulate expression of nucleic acids, used to
 PT provide compounds having defined physical, chemical or bioactive
 PT properties, e.g. antisense activity.
 PT
 XX Example 27; Page 109; 264pp; English.
 PS
 XX A method has been developed of defining a set of compounds that modulate
 CC the expression of a target nucleic acid (tNA) sequence via binding of the
 CC compounds with the tNA sequence. The method comprises generating a
 CC library of virtual compounds in silico according to defined criteria, and
 CC evaluating in silico the binding of the virtual compounds with the tNA

CC according to defined criteria. Also described are: (1) a method of
 CC defining a set of oligonucleotides (ONS) that modulate the expression of
 CC a tNA sequence via binding of the ONS with the tNA sequence comprising
 CC generating a library of virtual compounds in silico according to defined
 CC criteria, and evaluating in silico the binding of the virtual ONS with
 CC the tNA according to defined criteria; and (2) a method of defining a set
 CC of compounds that modulate the expression of a tNA sequence via binding
 CC of the compounds with the tNA. The methods can be used for the generation
 CC and identification of synthetic compounds having defined physical,
 CC chemical or bioactive properties. Information gathered from assays of
 CC such compounds is used to identify nucleic acid sequences that are
 CC tractable to a variety of nucleotide sequence-based technologies, e.g.
 CC antisense drug discovery and target validation. AAZ40852 to AAZ41220, and
 CC AAY52701 to AAY52706, represent sequences used in the exemplification of
 CC the present invention

XX SQ Sequence 18 BP; 4 A; 3 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 18;
 Best Local Similarity 93.3%; Pred. No. 1e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1136 ACCTGGAGAGATCA 1150
 DB 18 ACCTGGAGAGATCA 4

RESULT 1508

AAZ19519/c
 ID AAZ19519 standard; DNA; 18 BP.

XX AC AAZ19519;

DT 15-NOV-1999 (first entry)

XX Human G-alpha-11 phosphorothioate antisense oligonucleotide SEQ ID NO:59.
 DE Human; G-alpha-11; antisense oligonucleotide; inhibition; expression;
 KW phosphorothioate; ss.

XX OS Synthetic.
 OS Homo sapiens.

XX PN US5951455-A.

XX PD 14-SEP-1999.

XX PF 04-DEC-1998; 98US-00205922.

XX PR 04-DEC-1998; 98US-00205922.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Cowsert LM;

XX WPI; 1999-539140/45.

XX Inhibitory antisense compounds useful for the treatment of diseases
 PT associated with G-alpha-11.

XX Example 15; Col 40; 38pp; English.

XX The present invention describes inhibitory antisense compounds of 8-30
 CC nucleotides, targeted to a nucleic acid molecule encoding human G-alpha-
 CC 11. AAZ19468 to AAZ19547 represent human G-alpha-11 phosphorothioate
 CC antisense oligonucleotides given in the present invention. The
 CC oligonucleotides may be useful for the treatment of diseases associated
 CC with G-alpha-11

XX SQ Sequence 18 BP; 4 A; 3 C; 5 G; 6 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 18;
 Best Local Similarity 93.3%; Pred. No. 1e+03;

Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1136 ACCTGGAGAGATCA 1150
 DB 18 ACCTGGAGAGATCA 4

RESULT 1509

AAZ48531
 ID AAZ48531 standard; DNA; 18 BP.

XX AC AAZ48531;

DT 31-MAR-2000 (first entry)

DE Human TNFR1 mRNA inhibiting antisense oligo ISIS# 18924.

XX Tumour necrosis factor receptor type 1; TNFR1; antisense; infection;
 KW inflammation; tumour formation; TNFR1; anticancer; ss.

XX OS Synthetic.

XX OS Homo sapiens.

XX PN US6007995-A.

XX PD 28-DEC-1999.

XX PF 26-JUN-1998; 98US-00106038.

XX PR 26-JUN-1998; 98US-00106038.

XX PA (ISIS-) ISIS PHARM INC.

XX PI Baker BP, Cowsert LM;

XX WPI; 2000-105333/09.

XX Antisense inhibition of tumor necrosis factor type 1 expression for
 PT diagnosis, treatment and prevention of disease, particularly tumors.

XX Example 10; Col 25; 34pp; English.

XX The invention provides antisense compounds targeted to human tumour
 CC necrosis factor receptor type 1 (TNFR1) RNA. These antisense compounds
 CC can be used in a method of inhibiting the expression of TNFR1 human cells
 CC or tissues. The antisense compounds specifically hybridize with one or
 CC more nucleic acids encoding TNFR1 modulating the function of nucleic acid
 CC molecules encoding TNFR1, ultimately modulating the amount of TNFR1
 CC produced. The antisense compounds and method are useful as research
 CC reagents and diagnostics, and in the treatment and prophylaxis of
 CC infection, inflammation or tumour formation. Sequences AAZ48482-565
 CC represent antisense oligos used for inhibition of the human TNFR1 mRNA

XX SQ Sequence 18 BP; 8 A; 1 C; 7 G; 2 T; 0 U; 0 Other;

Query Match 0.6%; Score 13.4; DB 1; Length 18;
 Best Local Similarity 93.3%; Pred. No. 1e+03;
 Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1332 TGAAGAGAGAGGAGA 1346
 DB 4 TGAAGAGAGGAGATA 18

RESULT 1510

AAZ39595/c
 ID AAZ39595 standard; DNA; 18 BP.

XX AC AAZ39595;

DT 28-FEB-2000 (first entry)

XX Human CREL mRNA inhibiting antisense oligo ISIS #24079.

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XX Human; cREL; transcriptional activator; antisense compound; therapeutic;
KW ss.
XX
XX Synthetic.
OS Homo sapiens.
XX US6001652-A.
PN
XX 14-DEC-1999.
XX 18-SEP-1998; 98US-00156253.
XX 18-SEP-1998; 98US-00156253.
XX (ISIS-) ISIS PHARM INC.
XX Monia BP, Cowser LM, Baker BF;
XX WPI; 2000-061889/05.
XX Antisense modulation of human cREL expression.
XX Claim 1; Col 27; 26pp; English.
XX The invention provides antisense compounds targeted to a coding region,
CC 3'UTR or 5'UTR of a nucleic acid molecule encoding human cREL
CC (transcriptional activator). The antisense compounds are useful as
CC research agents and diagnostics such as in the elucidation of the
CC function of a particular gene. The antisense compounds can be useful as
CC therapeutic modalities that can be configured to be useful in treatment
CC regimes for treatment of cells, tissues and animals, especially humans.
CC In the prior art, there are no known therapeutic agents which effectively
CC inhibit the synthesis of cREL and additional agents capable of inhibiting
CC cREL function are still required. Sequences AA39588-627 represent
CC antisense phosphorothioate oligodeoxynucleotides inhibiting human cREL
CC mRNA
XX
XX Sequence 18 BP; 5 A; 4 C; 1 G; 8 T; 0 U; 0 Other;
SQ Query Match 0.6%; Score 13.4; DB 1; Length 18;
Best Local Similarity 93.3%; Pred. No. 1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 128 ACTATTATGGACAAG 142
Db |||||
15 ACTATTATGGAAAAG 1

RESULT 1511
AAZ72284/c
ID AAZ72284 standard; DNA; 18 BP.
XX
XX AAZ72284;
XX
XX 10-SEP-2001 (first entry)
XX
XX Human biallelic marker upstream amplification primer SEQ ID NO:6640.
XX Human genome; biallelic marker; high density disequilibrium map;
KW genomic map; haplotype; phenotype; polymorphic base; genotyping;
KW haplotyping; hybridisation; identification; characterisation;
KW amplification; single nucleotide polymorphism; SNP; PCR primer;
KW diagnosis; ss.
XX
XX Homo sapiens.
OS
XX WO9954500-A2.
PN
XX 28-OCT-1999.
XX
XX 21-APR-1999; 99WO-IB000822.
XX

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PR 21-APR-1998; 98US-0082614P.
PR 23-NOV-1998; 98US-0109732P.
XX
XX (GEST ) GENSET.
XX Cohen D, Blumenfeld M, Chumakov I;
XX WPI; 2000-013267/01.
XX Novel biallelic markers used to construct a high density disequilibrium
XX map of the human genome.
XX Claim 9; Page 1646; 2745pp; English.
XX
XX AAZ65654 to AAZ69578 represent human biallelic markers from the present
XX invention, which contain a polymorphic base at position 24 of their
XX nucleotide sequences. AAZ69579 to AAZ77440 represent amplification
XX primers for the biallelic markers. The biallelic markers of the invention
XX have a variety of uses: they can be used for high density mapping of the
XX human genome, and in complex association studies and haplotyping studies
XX which are useful in determining the genetic basis for disease states.
XX Compositions and methods of the invention can also be useful for the
XX identification of the targets for the development of pharmaceutical
XX agents and diagnostic methods, as well as the characterisation of the
XX differential efficacious responses to and side effects from
XX pharmaceutical agents acting on a disease as well as other treatment.
XX N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
XX 3367, are not actually given a sequence in the Sequence Listing from the
XX present invention
XX
XX Sequence 18 BP; 5 A; 0 C; 9 G; 4 T; 0 U; 0 Other;
SQ Query Match 0.6%; Score 13.4; DB 1; Length 18;
Best Local Similarity 93.3%; Pred. No. 1e+03;
Matches 14; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1556 TCCTCCCAACCCCT 1570
Db |||||
17 TCCTCACCACCCCT 3

RESULT 1512
AAAS3246/c
ID AAAS3246 standard; DNA; 18 BP.
XX
XX AAAS3246;
XX
XX 05-OCT-2000 (first entry)
XX
XX P450 polymorphism CYP3A4 PCR primer 3A4R1.
XX Cytochrome P450; CYP3A4; drug therapy; xenobiotic metabolism; PCR primer;
XX ss.
XX Unidentified.
XX
XX WO200024926-A1.
XX
XX 04-MAY-2000.
XX
XX 22-OCT-1999; 99WO-CA000982.
XX
XX 23-OCT-1998; 98US-00177359.
XX
XX (HOPI-) HOPITAL SAINTE-JUSTINE.
XX Sinnett D, Labuda D;
XX
XX WPI; 2000-350761/30.
XX
XX Oligonucleotide probes hybridizing to genes encoding xenobiotics
XX metabolizing enzymes cytochrome P450 and N-acetyl-transferase 2 (NAT2),
XX useful for detecting genetic polymorphisms.
XX

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